NR9/200.1/1960
c.1

COLORADO STATE PUBLICATIONS LIBRARY
3 1799 00125 0307

BUREAU OF MINES

State Services Building
1525 Sherman Street

Denver 3, Colorado

Midwest Inter-Library Center, Chicago

ANNUAL REPORT

for the Year

1960

1876

G. A. FRANZ, JR.
Deputy Commissioner of Mines

Publication Approved by E. G. Spurlin, State Controller

BUREAU OF MINES

State Services Building
1525 Sherman Street
Denver 3, Colorado

ANNUAL REPORT

for the Year

1960

1876

G. A. FRANZ, JR.
Deputy Commissioner of Mines

Publication Approved by E. G. Spurlin, State Controller

24

Publishers Press, 1830 Curtis St., Denver, Colorado

Table of Contents

Page

Letter of Transmittal 3

Personnel 4

Commissioners of Mines 5

Districts of Inspection 6

Publications of the Bureau of Mines 8

Foreword 11

Minerals in 1960 13

Summary of Production 16

County Activity and Production 17

Safety Awards 43

Injuries 45

Summary of Injuries 46

Fatal Injuries 46

Injury Statistics 50

Men Employed 58

First Aid Training 58

Inspections 59

Information Reports 60

List of Mineral Operations 61

Total Mineral Production for Colorado Inside Back Cover

Letter of Transmittal

May 1, 1961

Honorable Steve McNichols
Governor of Colorado
State Capitol
Denver 2, Colorado

Dear Governor McNichols:

In compliance with the requirements of Chapter 92, Article 32, Section 11, of the Colorado Revised Statutes 1953, I have the honor to transmit herewith the Report of the State Bureau of Mines for the year 1960.

Respectfully submitted,

G. A. Franz, Jr.

Deputy Commissioner of Mines

Personnel

G. A. Franz, Jr., Deputy Commissioner	Lakewood
Norman R. Blake, Inspector, District No. 1	Black Hawk
Fred E. Theobald, Inspector, District No. 2	Canon City
John W. Doyle, Inspector, District No. 3	Leadville
Elzie D. Ray, Inspector, District No. 4	Montrose
Joseph L. Keating, Deputy Inspector	Leadville
John H. Pakka, Deputy Inspector	Telluride
Margaret G. Lawrence, Principal Clerk	Denver
Thelma L. MacManus, Account Clerk	Denver
Naomi S. Jones, Clerk Stenographer	Denver
Agnes K. Brennan, Clerk Typist	Denver

Commissioners of Mines

Harry A. Lee	May 11, 1895-May 10, 1903
E. L. White	May 10, 1903-May 10, 1907
T. J. Dalzell	May 10, 1907-May 10, 1911
T. R. Henahen	May 10, 1911-May 10, 1915
Fred Carroll	May 10, 1915-May 10, 1919
Horace F. Lunt	June 1, 1919-June 1, 1923
John T. Joyce	June 1, 1923-June 12, 1939
Edward P. Arthur	June 12, 1939-August 26, 1943
Fred Jones	September 27, 1943-April 25, 1950
Walter E. Scott, Jr.	May 3, 1950-May 31, 1959

Director of Natural Resources

Dr. Edward L. Clark	October 15, 1959

Deputy Commissioner of Mines

G. A. Franz, Jr.

Districts of Inspection

DISTRICT NO. 1, all of the following counties: Adams, Arapahoe, Boulder, Cheyenne, Clear Creek, Denver, Douglas, Elbert, Gilpin, Grand, Jackson, Jefferson, Kit Carson, Larimer, Logan, Morgan, Phillips, Sedgwick, Washington, Weld, Yuma, and that part of Park County lying north of Fairplay.

DISTRICT NO. 2, all of the following counties: Alamosa, Baca, Bent, Conejos, Costilla, Crowley, Custer, El Paso, Fremont, Huerfano, Kiowa, Las Animas, Lincoln, Otero, Prowers, Pueblo, Teller, and that part of Park County lying south of Fairplay.

DISTRICT NO. 3, all of the following counties: Chaffee, Eagle, Garfield, Lake, Mineral, Moffat, Pitkin, Rio Blanco, Rio Grande, Routt, Summit, and that part of Gunnison County in the extreme northwest corner and lying north of the 39th degree of latitude, and that part of Saguache County lying south and east of the Continental Divide.

DISTRICT NO. 4, all of the following counties: Archuleta, Delta, Dolores, Hinsdale, La Plata, Mesa, Montezuma, Montrose, Ouray, San Juan, San Miguel, and Gunnison County, except the extreme northwest corner lying north of the 39th degree of latitude, and that part of Saguache County lying north and west of the Continental Divide.

Digitized by the Internet Archive
in 2013

http://archive.org/details/annualreportfory00colo_27

Publications of the Bureau of Mines

BULLETINS

Bulletin No. 1, Recommendations for Safety Appliance in Mining, Harry A. Lee, Commissioner of Mines, 1896.

Bulletin No. 2, Precious Metal Production for the Year 1898, Harry A. Lee, Commissioner of Mines, 1899.

Bulletin No. 3, Mining Laws, Relative to Bureau of Mines Precious Metal Production, Harry A. Lee, Commissioner of Mines, 1899.

Bulletin No. 4, Precious Metal Production, Harry A. Lee, Commissioner of Mines, 1901.

Bulletin No. 5, Precious Metal Production, Harry A. Lee, Commissioner of Mines, 1902.

Bulletin No. 6, Regulations Relative to the Construction, Equipment and Operation of Metalliferous Mines, Mills and Metallurgical Plants, Recommendations and Mineral Production for 1905, E. L. White, Commissioner of Mines, 1906.

Bulletin No. 7, Federal and State Laws Relating to Mining, Fred Carroll, Commissioner of Mines, 1916.

Supplement to Bulletin No. 7, Mining Laws Enacted by the Twenty-First General Assembly, Fred Carroll, Commissioner of Mines, 1917.

Supplement No. 2 to Bulletin No. 7, Amendments to the Mining Laws Enacted by the Twenty-Second General Assembly, Horace F. Lunt, Commissioner of Mines, 1919.

Supplement No. 3 to Bulletin No. 7, Amendments to Laws Relating to Mining Enacted by the Twenty-Third General Assembly, Horace F. Lunt, Commissioner of Mines, 1921.

Supplement No. 4 to Bulletin No. 7, Amendments to Laws Relating to Mining Enacted by the Twenty-Fourth General Assembly, Horace F. Lunt, Commissioner of Mines, 1923.

Bulletin No. 8, The Oil Shales of Northwestern Colorado, Horace F. Lunt, Commissioner of Mines, 1919.

Bulletin No. 9, Mine Safety Standards, Horace F. Lunt, Commissioner of Mines, 1920.

Bulletin No. 11, Federal and State Laws Relating to Mining, John T. Joyce, Commissioner of Mines, 1931.

Bulletin No. 12, Mining Laws of Colorado, Edward P. Arthur, Commissioner of Mines, 1942.

Bulletin No. 13, Mining Laws of Colorado, Fred Jones, Commissioner of Mines, 1946.

Bulletin No. 14, Mining Laws of Colorado, Fred Jones, Commissioner of Mines, 1949.

Bulletin No. 15, Oil Well Safety Laws, Walter E. Scott, Jr., Commissioner of Mines, 1953.

Circular No. 1, Location of Lode and Placer Mining Claims, Walter E. Scott, Jr., Commissioner of Mines, 1953.

Bulletin No. 16, Colorado Mining Laws with Rules and Regulations, Walter E. Scott, Jr., Commissioner of Mines, 1954.

Circular No. 1, Revised, Location of Lode and Placer Mining Claims, Walter E. Scott, Jr., Commissioner of Mines, 1957.

Bulletin No. 17, Safety Rules and Regulations (Condensed), G. A. Franz, Jr., Deputy Commissioner of Mines, 1959.

Circular No. 2, Minerals of Colorado and Area Locations, G. A. Franz, Jr., Deputy Commissioner of Mines, 1960.

REPORTS

Report of Bureau of Mines, Colorado, from its establishment in May, 1895, to November 30, 1896, Harry A. Lee, Commissioner of Mines.

Annual Reports for 1897-1898, Harry A. Lee, Commissioner of Mines.

Biennial Reports for 1899-1902, Harry A. Lee, Commissioner of Mines.

Biennial Reports for 1903-1906, E. L. White, Commissioner of Mines.

Biennial Reports for 1907-1910, T. J. Dalzell, Commissioner of Mines.

Biennial Reports for 1911-1914, T. R. Henahen, Commissioner of Mines.

Biennial Reports for 1915-1918, Fred Carroll, Commissioner of Mines.

Annual Reports for 1919-1922, Horace F. Lunt, Commissioner of Mines.

Annual Reports for 1923-1924, John T. Joyce, Commissioner of Mines.

Annual Report for 1925 was fully prepared but, because of lack of funds, was not printed. The manuscript is on file in the office of the State Bureau of Mines.

Annual Reports for 1926-1935, John T. Joyce, Commissioner of Mines.

Owing to lack of funds the Annual Report for 1936 was not published.

Annual Report for 1937, John T. Joyce, Commissioner of Mines.

Owing to lack of funds the Annual Report for 1938 was not published.

Annual Report for 1939, Edward P. Arthur, Commissioner of Mines.

Owing to lack of funds the Annual Report for 1940 was not published.

Annual Report for 1941, Edward P. Arthur, Commissioner of Mines.

Annual Reports for 1942 and 1943, Fred Jones, Commissioner of Mines.

Lists of Mines for 1944 and 1945, Fred Jones, Commissioner of Mines.

Annual Reports for 1946-1947, Fred Jones, Commissioner of Mines.

Annual Report for 1948 was not published.

Annual Reports for 1949-1958, Walter E. Scott, Jr., Commissioner of Mines.

Annual Reports for 1959-1960, G. A. Franz, Jr., Deputy Commissioner of Mines.

Foreword

The year 1960 saw the Bureau of Mines offices moved from the State Museum Building to the third floor of the new State Services Building, north of the State Capitol. Our new quarters are modern in every respect and the new location affords easy access to other Natural Resources departments of the State.

Annual reports prior to this year have listed in detail the functions of the Bureau of Mines and to some extent its accomplishments. These functions have not changed during 1960 with the exception that more information, deemed of value to the industry, has been collected and we are continually endeavoring to accumulate this type of information for the interested public.

In order that those interested may know what type of information can be obtained from the Bureau of Mines we will devote this portion of the 1960 report to enumerating the specific information obtainable from our office.

Our library contains bound volumes of all U.S.G.S. bulletins and professional papers from which old and current information on world, North American and Colorado Geology, rock structure, deposits and formations can be obtained. We have a complete set of Colorado Geological Survey Bulletins, Colorado Scientific Society papers and U.S.G.S. Annual Reports. We also have a set of U.S.G.S. Mineral Resources and most all of the U. S. Bureau of Mines bulletins pertaining to Colorado. In addition to this we have many current volumes on metallurgy, mineral facts and problems, as well as a complete set of Mineral Yearbooks giving the United States and world production of the mineral industry.

We maintain a current information file on all mineral activity in Colorado as well as on all minerals found in this and other states and countries. This information file contains unpublished reports and papers of interest to the industry and state. It also contains engineers' reports on a number of areas and properties in Colorado. During the last year we have secured a complete set of quadrangle maps and detailed section maps of Colorado and this is in addition to the many area and property maps we have accumulated over the years. We also have geological maps of most areas in Colorado as well as some detailed sections. Our map department is being continually improved and at present we are collecting maps of underground workings from every operating property in the State. These maps are available for reference only on written permission from the present operators.

Probably the most important source of information in our office is some 32,000 Inspection, Information and Operators' Annual Reports on all properties dating from 1895 to the present date. Some of these reports are bound and written in longhand. The most recent reports from 1915 are bound in individual folders. From these reports it is possible to secure a year to year description of activities, production, employment, and development from the day the property started to the present. Information on the owners and operators, type of ground, size of vein and the condition of the country rock, pertaining to those mines is in many cases available from no other source. These reports are filed by mine name and a cross index will give a complete listing of mine operations since 1895.

The Bureau of Mines welcomes personal calls, phone calls, or letters requesting information on any subject pertaining to the mineral industry. All of the above facilities are available to the public and any of the above can be used in the office. We do not allow any item to be removed from the premises. Special arrangements can be made to secure Verifax or certified copies of any report when extraordinary conditions warrant this service. The Bureau of Mines also has circulars for distribution on Colorado minerals, placer locations, the manner of locating a mineral claim, and others of interest to both students and potential operators. Information on mining and oil well safety laws in Colorado is freely given and assistance along this line may be had from any of our six mine inspectors.

Every effort has been made to assure accuracy and completeness of the data used in this report. However, because of the fact that this report is printed before final production figures can possibly be secured, there will be some minor variations in the final results. It is intended to present an early resume of mining activity in Colorado for the year and to indicate the value of the mineral industry to the State and county.

Acknowledgment is gratefully given to the various State agencies, the Occupational Health Section of the Colorado Health Department, and the United States Bureau of Mines for their generous cooperation during the year.

This report has been compiled through the cooperation of the entire staff of the Bureau of Mines. Each and every member of the office personnel and inspection division is to be congratulated for his most generous contribution and help all during the year. It is the desire of all personnel of the Bureau of Mines to cooperate with the industry in every way and we earnestly solicit all inquiries, where constructive, that will tend to develop mining in Colorado.

G. A. Franz, Jr.

Minerals in 1960

Colorado's mineral production of $376,298,093 based on the quantity of minerals produced and the average yearly mineral price for 1960, shows an increase of $44,434,458 over 1959. The increased production value is listed in petroleum, molybdenum, uranium, vanadium, lead, clay, lime, mica and perlite and the addition this year of coal production. Decreased production values were listed in cement, feldspar, fluorspar, gypsum and others.

Crude oil production of $137,659,948 in 1960 showed the first increase since 1956 and this increased production was due in part to secondary recovery projects at Colorado's two largest fields, Rangely in northwest Colorado and Adena in northeast Colorado. Over-all drilling operations in the State decreased during the year with some 130 successful completions of oil wells and 119 successful gas wells. Three hundred forty-eight wildcat wells were drilled and of these twenty-six located new oil deposits and twenty-two located new gas deposits. With increased secondary recovery projects in the planning and in actual operation, along with new discoveries in other parts of the State, petroleum production should remain steady if not increased in 1961.

Although gold production in Teller County again dropped to a new low in 1960, Colorado's over-all gold production increased as a by-product from producers of base metals in other areas of the State. Silver production likewise increased for the year as did lead and copper. Zinc, however, showed a slight decrease due to part year production at the Empire Zinc Company's Eagle Mine in Eagle County, caused by a company-wide strike. Major producers of base and precious metals, in the order of 1960 production, were Idarado Mining Company, Empire Zinc Company, Emperius Mining Company, Rico Argentine Mining Company and the Golden Cycle Corporation.

Molybdenum production in 1960 again leads the list of metallic minerals mined in Colorado. All of this production came from the Climax Molybdenum Division of American Metals Climax Company's property at Climax, Colorado. Production continued throughout the year without interruptions and plans for continued high production were assured by careful and practical development of their ore bodies.

Uranium and vanadium were next in order in dollar value production with the major part of this ore coming from the Colorado Plateau. The average grade of uranium ore mined in Colorado had a U^3O^8 content of .25% as compared with .26% in 1959. Some contracts with the Atomic Energy Commission were extended to 1966 and most producer contracts were in the process of being extended to this date from 1962. Colorado maintained its second place standing in uranium production, surpassed only by the State of New Mexico.

Other metallic minerals which received considerable attention in Colorado in 1960 were beryl, columbium and iron. Beryl deposits in the form of bertrandite in the Lake George area were developed by the U. S. Beryllium Company. Columbium was developed by E. I. du Pont de Nemours & Company near Powderhorn, Colorado. Iron ore was mined near Ashcroft in Pitkin County.

Non-metallic mineral production remained third in dollar value of minerals produced in 1960. A slight decline in construction was responsible for a drop in cement manufacturing, which directly resulted in a decline in gypsum, feldspar and scoria. Cement production at the plants of the Ideal Cement Company, located at Portland and La Porte, decreased enough to counteract the increased production of sand and gravel, leaving the State with an approximate 4% decrease in over-all non-metallic production. General highway construction and project construction and maintenance were responsible for the continued increased output of sand and gravel. Stone production for building purposes and monumental design continued steady with an increased interest in the red and gray sandstone quarried in Larimer and Boulder Counties.

In general, Colorado's mineral industry, although declining steadily in the number of base metal operations, which are directly affected by fixed prices on gold and silver and high operating costs, continues to be supported by other metals and non-metallics. Petroleum, uranium and molybdenum, along with other plentiful minerals in the State, have replaced the production value formerly enjoyed by gold, silver, lead and zinc.

The following comparative list of average prices used to calculate Colorado's mineral production is indicative of the reason for our decreasing base metal industry.

	1960	**1959**	**1947**	
Gold	$35.00	$35.00	$35.00	per oz.
Silver	0.91375	0.91202	0.905	per oz.
Copper	0.32053	0.31182	0.300	per lb.
Lead	0.11948	0.12211	0.144	per lb.
Zinc	0.12946	0.11488	0.115	per lb.
Molybednum	1.250	1.250	1.10	per lb.

Most prices have lowered or remained steady, while production costs have steadily increased.

Information in this report is gathered by Bureau of Mines Inspectors and office personnel and although the production figures cannot be accepted as final, they are as nearly accurate as possible to secure at this early date. They are intended as a preliminary indication and cannot be used for tax or other valuation purposes. Petroleum production is supplied by the Colorado Oil and Gas Conservation Commission and the dollar value is calculated by this office. All production figures are calculated by multiplying the units of production by the average yearly prices.

Production of Metals, Non-Metallics, Petroleum and Coal

State Totals

	Metallics
Molybdenum	$ 62,038,147
Uranium	51,682,365
Vanadium	15,603,408
Zinc	8,172,924
Lead	4,420,555
Tungsten	3,609,632
Copper	2,254,966
Gold	1,992,156
Silver	1,312,280
Pyrite	1,088,536
Beryl	297,343
Manganese	61,200
Iron	57,000
Tin	37,620
Total Metallic Mineral Production	$152,628,132

	Non-Metallics
Cement	$ 17,042,416
Sand and Gravel	15,559,778
Stone	2,349,808
Limestone	1,347,243
Fluorspar	1,239,444
Clay	1,143,785
Feldspar, Mica, Gypsum	384,578
Volcanic Scoria, Pumicite	67,632
Miscellaneous Non-Metallics (Peat,Silica Sand, etc.)	37,605
Gemstones	34,360
Total Non-Metallic Minerals	$ 39,206,649

	Petroleum
Crude Oil	$137,659,948
Gas (All classes, well head value)	23,787,087
Total Petroleum Production	$161,447,035
Coal	$ 23,052,277
TOTAL STATE MINERAL PRODUCTION	$376,334,093

County Activity and Production

ADAMS (1) *BRIGHTON

Area 1,250 square miles
Gravel placers, plants, oil wells—123 men

The second productive oil field in Colorado is still active in Adams County. Petroleum production from this county has been relatively steady for a number of years with an average of new completions and abandonments. Sand and gravel, gold and stone were produced from the several pits and quarries in the west end of the county. Gold was produced as a by-product of the sand and gravel industry.

Gold	$	10,000
Sand and Gravel	$	1,540,602
Petroleum		2,731,327
Gas		177,157
Total	$	2,908,484
TOTAL PRODUCTION FOR COUNTY	$	4,459,086

ARCHULETA (4) *PAGOSA SPRINGS

Area, 1,364 square miles
Projects, placers, oil and gas wells—110 men

Sand and gravel, crude oil and gas were again the major minerals produced in Archuleta County. By far the largest oil production came from the Gramps field owned by the Hughes Estate and operated by the Oriental Oil Company. This field is located southeast of Pagosa Springs in the original Terra Amarilla land grant. Oil produced at this field is dewatered in the company's modern plant and then is pumped to the railroad in Chama, New Mexico.

Sand and Gravel	$	9,000
Petroleum	$	297,865
TOTAL PRODUCTION FOR COUNTY	$	306,865

---

*County seats

BACA (2) *SPRINGFIELD

Area 2,565 square miles
Oil wells, placers—35 men

Petroleum activity continued in Baca County with the addition of several new producing gas wells and other drilling ventures. Natural gas production in the county for 1960 indicated a slight increase over 1959.

Sand and Gravel	$	3,613
Gas	$	51,397
TOTAL PRODUCTION FOR COUNTY	$	55,010

BOULDER (1) *BOULDER

Area 758 square miles
16 mines, 5 plants, 12 quarries, projects and oil—391 men

Boulder County's versatile mineral industry, severely curtailed by the loss of tungsten production, continues to show a determination to keep the industry alive. Fluorspar production in the county remained steady with production coming from the Burlington Mine and the Emmett Mine near Jamestown. The Valmont Plant of the General Chemical Division of Allied Chemical Corporation operated steadily all year on ore from their Burlington Mine and ore from Williams' Emmett Mine. A substantial deposit of uranium ore has been developed by the La Salle Mining Company at their Fair Day Tunnel located two and a half miles west of Jamestown, Colorado. The Utex Exploration Company continued gold and silver development in their Cash and Rex properties east of Gold Hill and on Gold Creek. Building and flagstone quarries in Boulder County continued throughout the year on a steady production basis, supplying red, pink and gray sandstone to the building trade in the Rocky Mountain Empire. Many mines were opened for prospecting and development of gold and silver ores.

Gold	$	2,210
Silver		6,643
Copper		266
Lead		2,399
Tungsten		37,675
Tin		2,500
Total	$	51,693
Sand and Gravel		55,199
Fluorspar		1,239,444
Stone		95,200
Clay		14,000
Peat		970
Total	$	1,404,813
Petroleum	$	7,076
TOTAL PRODUCTION FOR COUNTY	$	1,463,582

---

*County seats

CHAFFEE (3) *SALIDA

Area 1,040 square miles
2 mines, 2 plants, quarries and oil—76 men

Limestone, granite, sand and gravel, mica, beryl, and feldspar comprised most of Chaffee County's mineral production for 1960. The Colorado Fuel & Iron Works' Limestone Quarry, located on the east side of Monarch Pass, supplied a considerable amount of fluxing material to the CF&I steel plant at Pueblo. The Crystal Placer, operated by the Salida Granite Company and located on Ute Trail northeast of Salida, had a steady production of granite for monumental purposes. The Homestake Quarry, operated by M&S, Inc. and the Rock King Quarry, producers of feldspar, mica and beryl, sent their ore to the Western Feldspar Mill which was operated by the Western Feldspar Milling Company at Salida. Prospecting and development activity was evident throughout the year. A portable mica mill was field-tested by Mica Minerals, Inc. twelve miles north of Salida on the Turret Road. Mica ore for the plant was received from Lamberg Brothers of Salida.

Gold .....$	200
Sand and Gravel	78,000
Limestone	437,778
Stone	25,400
Feldspar, Mica, etc.	198,601
Total .....$	739,779
TOTAL PRODUCTION FOR COUNTY .....$	739,979

CLEAR CREEK (1) *GEORGETOWN

Area 395 square miles
24 mines, 6 plants, projects—191 men

Clear Creek County's mineral activity suffered a minor setback in 1960 as a direct result of inadequate and fixed mineral prices. Operations at the Big Five, or Central Tunnel, were active only part of the year. Some work was done by the Fall River Exploration Company toward dewatering the Argo Tunnel which according to plans will eventually be connected to the Lucania Tunnel. Some production came from the Bald Eagle property which produced considerable gold, silver, lead and copper ore in previous years. Road construction in Clear Creek Canyon below Idaho Springs was in full force all year with the completion of a four-lane highway to the Floyd Hill interchange and the holing through of the Twin Tunnels above the Floyd Hill interchange. Sand and gravel production in the county increased because of this accelerated road construction. Many small properties in the county were active doing pros--pecting and development work, which indicates possible future and increased mining activity in the county. The selection of the Strait Creek site for the new transcontinental highway project will, no doubt, employ many miners of the area when the tunnel project is started.

---

*County seats

Gold	$	59,000
Silver		21,000
Copper		9,000
Lead		32,000
Beryllium		500
Total	$	121,500
Sand and Gravel		116,330
Stone		180
Total	$	116,510
TOTAL PRODUCTION FOR COUNTY	$	238,010

COSTILLA (2) *SAN LUIS

Area 1,220 square miles

Gravel and well drilling—20 men

The announcement by Easterdale Oil Company to drill a test well in Section 23, Township 74 West in Costilla County was an indication that petroleum might one day be added to the production of this county. Production now consists of volcanic scoria from the Colorado Aggregates, Inc. scoria quarry two miles west of Mesita. Sand and gravel also added to the county production.

Sand and Gravel	$	10,000
Scoria		37,800
TOTAL PRODUCTION FOR COUNTY	$	47,800

CUSTER (2) *WESTCLIFFE

Area 738 square miles

4 mines, gravel—18 men

Mineral activity in Custer County centered around prospecting and development operations near Westcliffe and Wetmore. Eisenhour and Decker operated the Buckeye Holt property and Charles and Lyman Akin operated the Lodge Pole No. 1 and Tomboy Mines. Joe J. and Charles Tomsick sampled the Virginia Silver Mine near Westcliffe. A small production was noted from the county.

Sand and Gravel	$	3,506
TOTAL PRODUCTION FOR COUNTY	$	3,506

---

*County seats

DELTA (4) *DELTA

Area 1,161 square miles

Projects, placers, drilling—110 men

Highway construction by C. E. Mills Construction Company and Siegrist Construction Company and construction on the Smith Fort Dam were responsible for increased sand and gravel production in Delta County this year. Other mineral products were carbon dioxide gas and sulphur. Some wildcat oil well drilling was evident in 1960. The Atlas Mining & Milling Company's sulphur pits located east of Delta have been sold to Sun-Gro Materials, Inc. of Long Beach, California. Mined material from these pits will be used for soil conditioner.

Sand and Gravel	$	49,825
Sulphur		3,000
TOTAL PRODUCTION FOR COUNTY	$	52,825

DENVER (1) *DENVER

Area 73 square miles

2 plants—171 men

Although there was no mineral production from Denver County two large plants, operating on ores from other parts of the State and the Rocky Mountain area, were active all year. The Globe Plant of the American Smelting & Refining Company located at 495 East Fifty-first Street has operated in excess of five years or 1,780 days or 1,150,000 man-hours without a lost-time injury. The General Chemical Division, Allied Chemical Corporation, Denver plant operated all year manufacturing sulphuric acid and other chemicals. Many Colorado mining companies have their main offices in Denver.

Sand and Gravel	$	420,688
TOTAL PRODUCTION FOR COUNTY	$	420,688

---

*County seats

DOLORES (4) *DOVE CREEK

Area 1,029 square miles

5 mines, 2 plants, projects and drilling—198 men

Five mines, two plants, two projects and one placer were in operation in Dolores County during 1960. The county's largest operator, the Rico Argentine Mining Company at Rico, maintained steady production at their mill and acid plant on ores from the St. Louis Tunnel and their Mountain Springs Mine. Some vanadium ore was mined by the Vanadium Corporation of America at their Barlow claims near the head of Barlow Creek; and some silver, gold, copper and manganese were mined at the Rosebud group by Brown & Johnson. Jones & Harrington worked the St. Louis Mine for some gold production. Union Carbide Nuclear Company established offices in Dove Creek during the year.

Silver	$	8,000
Lead		249,318
Zinc		90,163
Uranium		....
Vanadium		....
Pyrite		840,796
Total	$	1,188,277
Sand and Gravel	$	157,316
TOTAL PRODUCTION FOR COUNTY	$	1,345,593

DOUGLAS (1) *CASTLE ROCK

Area 844 square miles

4 mines, quarries, gravel—100 men

Clay, sand and gravel, silica sand and limestone were produced in Douglas County in 1960. Principal producers were the Robinson Brick & Tile Company from their Hogback Nos. 2 and 3 clay mines near Waterton, Denver Brick & Pipe Company from their Ringenberg Clay Mine, and Stroud Whisenhunt from their Stevens Ranch and Stroh Mines. Several sand and gravel plants operated in Douglas County during the year.

Sand and Gravel	$	70,000
Stone		4,500
Clay		211,090
TOTAL PRODUCTION FOR COUNTY	$	285,590

---

*County seats

EAGLE (3) *EAGLE

Area 1,686 square miles

1 mine, 1 plant, gravel—513 men

Base and precious metal production at the New Jersey Zinc Company's Eagle property was curtailed to some extent during the year by a strike which started August 5 and ended November 28. During this strike maintenance crews were kept at the mine and mill, which enabled almost normal production to continue after the strike ended. Other county operations were at the Dotsero Quarry where volcanic cinders were produced by the Ideal Lava Products Company, and at the Roaring Fork Quarry twenty-two miles southeast of Glenwood Springs where pumice was produced by E. H. Bone.

Silver	$ 300,000
Copper	300,000
Lead	1,205,520
Zinc	3,735,000
Total	$ 5,540,520
Sand and Gravel	18,847
Scoria	6,406
Total	$ 25,253
TOTAL PRODUCTION FOR COUNTY	$ 5,565,773

EL PASO (2) *COLORADO SPRINGS

Area 2,159 square miles

1 mine, 3 quarries, gravel and drilling—119 men

Silica sand, concrete aggregate, limestone, sand and gravel were the principal products produced in El Paso County during 1960. Aggregate was produced at the Castle and Lennox Breed Quarries northwest of Colorado Springs. Limestone came from the Rampart Range Mine located on the Rampart Range Road. Silica sand was produced from the Springs Silica Quarry on the Flying W Ranch. Sand and gravel from many pits was the principal county mineral product.

Sand and Gravel	$ 1,125,035
Limestone	165,000
Silica	4,500
TOTAL PRODUCTION FOR COUNTY	$ 1,294,535

---

*County seats

FREMONT (2) *CANON CITY

Area 1,562 square miles
15 mines, 2 plants, 9 quarries, drilling—282 men

Cement, manufactured by the Ideal Cement Company at Portland, was the county's principal mineral product. Twenty-five separate mineral operations were listed for the year and the production from these include cement, sand and gravel, limestone, various building stones, clay, gypsum, uranium, beryl, and petroleum. During the year Cotter Corporation's uranium mill at Canon City was enlarged to treat 200 tons of ore per day. This tonnage comes from mines in the district as well as from the Front Range area and Gunnison County. Colonna & Company expanded their plant for increased production of terrazzo chips and colored stones. The Antero Beryllium Corporation completed their beryllium oxide plant at Florence and ores from the Lake George area will be treated. Some copper was produced from the Boot Jack Mine, four and a half miles north of Howard. Silica rock, used in the manufacturing of fire brick and for ladle lining, was produced steadily all year from the Horney and Burnito quarries, operated by Ralph Pierce and Ray Sturbaum, respectively. Petroleum production was steady from Colorado's oldest oil field near Florence.

Tungsten	$ 4,772
Uranium	
Cement	7,814,162
Sand and Gravel	98,047
Limestone	424,522
Stone	153,768
Clay	9,761
Gypsum	47,000
Silica	37,249
Total	$ 8,584,509
Petroleum	$ 78,979
TOTAL PRODUCTION FOR COUNTY	$ 8,663,488

---

*County seats

GARFIELD (3) *GLENWOOD SPRINGS

Area 3,000 square miles

2 mines, plant, quarry, drilling—272 men

Natural gas, limestone, sand and gravel were the principal minerals produced in Garfield County during 1960. With continuing oil exploration some petroleum production may be expected. Both the Union Oil Company and the United States Government oil shale properties were idle, with the exception of the simulated atomic blast at the U. S. Bureau of Mines oil shale mine during the year. This blast was for test purposes to determine the effect of a nuclear explosion on subsurface rock structure. The Union Carbide Nuclear Company's uranium and vanadium plant operated continuously all year on ores from their many properties in Colorado, Utah and Wyoming. Late in the year work started to recondition the Rifle vanadium mine, fourteen miles northeast of Rifle. Ore from this once heavy producer of vanadium ore will be treated in the Rifle Mill. Limestone produced by Frank H. Norberg from the Glenwood Springs lime quarry was used for sugar refining, construction and lime manufacturing.

Sand and Gravel	$	44,569
Limestone		53,316
Total	$	97,885
Petroleum	$	139,529
TOTAL PRODUCTION FOR COUNTY	$	237,414

GILPIN (1) *CENTRAL CITY

Area 149 square miles

19 mines, 3 plants, gravel, placers—77 men

With three mills, nineteen mines and seven placers and peat operations listed, Gilpin County was most active in prospecting and development work. However, production from the county was very light due largely to inadequate and set mineral prices. The Nye Mathews operation in the Apex Area was the only continuous operation during the year. Their molybdenum prospect looks very encouraging. Late in the year work was resumed at the Glory Hole, Inc. property which included the driving of a new access crosscut tunnel which will connect the LaCross workings with the Glory Hole Mill. Several mines were operated as tourist attractions and many mines were opened and sampled. Very little new ground was opened nor can this type of development be expected until more promising mineral prices are realized.

---

*County seats

Gold	$	1,424
Silver		100
Copper		100
Total	$	1,624
Sand and Gravel		200
Stone		500
Peat		14,135
Total	$	14,835
TOTAL PRODUCTION FOR COUNTY	$	16,459

GUNNISON (3 and 4) *GUNNISON

Area 3,243 square miles

14 mines, 4 plants, quarries, gravel—286 men

Of significance to Gunnison County's mineral industry is the development of the carbonate columbium deposit near Powderhorn, Colorado. Work for the duPont Company by Stearns-Roger continued during the summer months on this deposit and present plans call for more development in the summer of 1961. Prospecting and development work with some production of gold, silver, lead, zinc and copper were listed during the year from mines in the Taylor River and Crested Butte areas. Uranium production from the mines in the area was shipped to the Gunnison Mining Company's mill located south of Gunnison city limits. This mill had a steady production all year on ores from Fremont, Saguache and other counties in the State. Some marble was produced by the Colo-Tex Stone Company from Basic Chemical Corporation's quarry at Marble. Earth-work on the Paonia project was about 80% completed at the end of the year and completion is expected sometime in 1961.

Silver	$	15,788
Copper		1,779
Lead		36,409
Zinc		71,434
Uranium		....
Total	$	125,410
Sand and Gravel		182,434
Stone		4,100
Total	$	186,534
TOTAL PRODUCTION FOR COUNTY	$	311,944

---

*County seats

HINSDALE (4) *LAKE CITY

Area 1,062 square miles

3 mines, 1 plant, projects—24 men

Three mines and a mill were active in Hinsdale County. The Pelican Mill, operated by the Coltex Mining Company, concentrated gold, silver, lead and zinc ores from the Pelican Mine on Henson Creek west of Lake City. Other operators were the Golden Cycle Corporation on the Frank Hough and Reitcher, Waffensmith and Stake on the Blue Ribbon claims.

Gold	$	800
Silver		5,675
Lead		300
TOTAL PRODUCTION FOR COUNTY	$	6,775

JACKSON (1) *WALDEN

Area 1,628 square miles

Oil wells—80 men

There was no mining activity recorded in Jackson County during the year. However, much new interest was shown in oil and gas. Crude oil production declined over 1959 and gas production increased. Most production came from the Battleship, McCallum and Canadian River fields. Considerable exploration drilling was noted during the year.

Petroleum	$	2,473,656
Gas		8,966,023
TOTAL PRODUCTION FOR COUNTY	$	11,439,679

JEFFERSON (1) *GOLDEN

Area 791 square miles

29 mines, 6 plants, 8 quarries, gravel—269 men

Jefferson County's mineral activities in 1960 included the operation of three projects, six processing plants, eight quarries and tweny-nine mines. Production, in order of dollar value, consisted of sand and gravel, uranium, clay, stone, scrap mica, and beryl. Sand and gravel were produced steadily by the Brannan Sand & Gravel Company, Rio Grande Company, Asphalt Paving Company and Table Mountain, Inc. Uranium was produced by the Denver Golden Corporation from the Schwartzwalder property on Ralston Creek, and by the Yellow Queen Uranium Company, Cotter Corporation, Joseph Walsh and others. Clay production from the properties of the George W. Parfet Estate, Denver Fire Clay Company, Denver

---

*County seats

Brick & Pipe Company, Wesley D. Conda, John L. Harvey, Lakewood Brick & Tile Company, Robinson Brick & Tile Company, George Lindsay, and others was increased over last year's production, and remained an important part of mineral production in the county. Some petroleum production was listed from the Soda Lake area. A new light weight aggregate plant and quarry, owned by Idealite Incorporated, was under construction near Rocky Flats in Jefferson County.

Uranium	....
Sand and Gravel	$ 2,040,732
Stone	26,050
Clay	656,941
TOTAL PRODUCTION FOR COUNTY	$ 2,723,723

LAKE (3) *LEADVILLE

Area 384 square miles

3 mines, 3 plants, project—2,184 men

Through the operations of the Climax Molybdenum Division of American Metals Climax Company on Fremont Pass, Lake County continues to be the largest producer of metallic minerals in Colorado. The Climax operations had a steady year of unbroken production which resulted in an all-time high of over 11,600,000 tons mined this year. New development and exploration work continued with the sinking of the 18-foot circular shaft below the Storke Tunnel. Additional plans are under way to sink a large shaft from surface at the Storke level. Some production is expected from the 600 level below the Storke level by 1965. New surface treatment facilities were completed as was additional tailings storage. Additional men were employed at Climax during the year, and employment now exceeds 1,900 men. It was announced during the year that the American Smelting & Refining Company's Arkansas Valley Plant, started in 1879, would cease operations and be dismantled early in 1961. This plant has long been of major economic assistance to Leadville and the mineral industry in Colorado. On its closing the last early-day custom ore smelter for lead, copper, gold and silver in Colorado will be history. It was announced that the company will operate a buying station at Leadville and all ore will be routed or shipped to the company smelter in El Paso, Texas. Other mineral activity in the county showed some increase in the

---

*County seats

form of development and prospecting operations.

Gold	$ 7,539
Silver	2,165
Copper	3,120
Lead	680
Molybdenum	62,038,147
Tungsten	3,567,185
Pyrite	247,740
Tin	35,120
Total	$ 65,901,696
Sand and Gravel	$ 693
TOTAL PRODUCTION FOR COUNTY	$ 65,902,389

LA PLATA (4) *DURANGO

Area 1,691 square miles

8 mines, 2 plants, oil and gas—345 men

Fixed prices on gold and silver, combined with relatively low copper, lead and zinc prices and high operating costs, have had a retarding effect on La Plata County mining activity. Although several properties including the Neglected operations have been prospecting and developing for these minerals, very little production was recorded from the county. The Vanadium Corporation of America's uranium and vanadium plant at Durango operated on record tonnage all year from mines in New Mexico, Utah and Colorado. Their contract balance from the Atomic Energy Commission, expiring in 1962, is of significant value to county economy. Oil and gas production from Barker Dome, Ignacio, Red Mesa, and other fields was increased due to the successful completion of several new wells. Petroleum development activity was steady during the year with encouraging results.

Uranium	....
Vanadium	....
Sand and Gravel	$ 51,200
Petroleum	60,992
Gas	3,269,734
Total	$ 3,330,726
TOTAL PRODUCTION FOR COUNTY	$ 3,381,926

---

*County seats

LARIMER (1) *FORT COLLINS

Area 2,640 square miles

10 mines, 6 plants, 15 quarries—244 men

Even though a slight decrease in cement production was noticed in Larimer County, the Ideal Cement Company's Boettcher plant at La Porte continued to be the county's largest mineral producer. Limestone and shale, mined at the company quarry, supplied raw material for cement manufacturing. Gypsum was mined from the Loveland quarry by the United States Gypsum Company, as was limestone for sugar purification from the Rex Quarry operated by the Norberg Construction Company. Beryl production decreased and most of the beryl ore treated at Minerals Concentrates & Chemical Company's plant at Loveland came from the Boomer property in Park County. Stone production in the county from the Lyons and Masonville area remained steady during the year. Petroleum production remained a very valuable asset to the county's economy. Feldspar and mica production came from several quarries in the area.

Beryllium	$ 1,393
Cement	9,228,254
Sand and Gravel	841,411
Limestone	112,850
Stone	156,269
Feldspar, Mica, etc.	9,266
Gypsum	129,711
Total	$ 10,477,761
Petroleum	556,635
Gas	4,814
Total	$ 561,449
TOTAL PRODUCTION FOR COUNTY	$ 11,040,603

LAS ANIMAS (2) *TRINIDAD

Area 4,798 square miles

1 mine, gas wells, gravel—76 men

Clay, carbon dioxide, sand and gravel were the only metals produced, with the exception of coal, in Las Animas County in 1960. Clay production from the Santa Fe Mine, operated by the Scott Mining Company, was steady. Carbon dioxide from the Nina View field was piped to Bent County for conversion to dry ice.

---

*County seats

Sand and Gravel	$	75,893
Clay		27,011
Total	$	102,904
Gas	$	9,949
TOTAL PRODUCTION FOR COUNTY	$	112,853

LOGAN (1) *STERLING

Area 1,849 square miles

Oil and gas wells—320 men

Logan County was again fourth in petroleum production in the State with 4,582,809 barrels of oil and fifth in gas production with 10,287,473 mcf. Four hundred sixty-seven (467) producing wells, located in 103 fields, were active in 1960. Development activity continued throughout the year.

Petroleum	$	13,290,146
Gas		1,172,772
TOTAL PRODUCTION FOR COUNTY	$	14,462,918

MESA (4) *GRAND JUNCTION

Area 3,334 square miles

56 mines, 7 plants, projects, gravel—1,081 men

Carnotite ores from Beaver Mesa, Outlaw Mesa, Calamity Mesa, Tenderfoot Mesa, and many other areas of the county have assisted Mesa County to maintain its third place in State uranium and vanadium production. Of the seven uranium concentrators in Colorado, Climax Uranium plant at Grand Junction was the first to receive a contract with the Atomic Energy Commission to extend operations beyond 1962. The new contract runs from August 1960 through December of 1966. The plant is capable of processing 330 tons of crude ore per day. Both company and independent ores from the Colorado Plateau will be processed. Several wildcat wells were drilled in 1960. Some gas and oil production was recorded. In addition to uranium and oil, some clay was mined and brick produced by the Grand Junction Brick & Tile Company. Sand and gravel was produced by several independent contractors for road surfacing and concrete aggregate. The Whitewater Sand & Gravel plant at Whitewater was active all year. Some stone was quarried south of Loma on the Colorado River and

---

*County seats

hauled to Ridgway for cutting and sizing. Plant expansions were completed by the American Gilsonite Company at their plant near Fruita, Colorado.

Uranium		
Vanadium		
Sand and Gravel	$	310,559
Stone		275
Clay		3,000
Total	$	310,834
Gas	$	67,453
TOTAL PRODUCTION FOR COUNTY	$	378,287

MINERAL (3) *CREEDE

Area 923 square miles

4 mines, 1 plant, gravel—64 men

The Emperius Mining Company, the State's third largest producer of lead and zinc ores, carried on continuous operations at their Amethyst Mine. Ore from the Amethyst was milled in the company mill below Creede. Other operations in the county included the Jack Pot, Monon, and Phoenix Mines, operated by the H. & B. Construction Company, Monon Mining Company, and the Outlet Mining Company, respectively. Lead, zinc, silver and gold prospecting was evident through the year and several sand and gravel plants produced aggregate for highway surfacing and the construction trade.

Gold	$	25,571
Silver		260,211
Copper		62,872
Lead		371,892
Zinc		443,785
Total	$	1,164,331
Sand and Gravel	$	46,696
TOTAL PRODUCTION FOR COUNTY	$	1,211,027

MOFFAT (3) *CRAIG

Area 4,761 square miles

8 mines, 1 plant, projects—465 men

Uranium and petroleum were the principal mineral products of Moffat County during 1960. Some sand and gravel were produced by private operators for highway surfacing in

---

*County seats

the building trade. Trace Elements Corporation, a subsidiary of Union Carbide Nuclear Company, operated the Maybell Mill on uranium ore from their pits near the plant. Production during the year was at capacity. In excess of 1,000 tons of low-grade ore per day was treated in this new and modern plant. Petroleum production came from the Danforth Hills, Moffat, Maudlin, Elk Springs, Powder Wash, Isles Dome and Hiawatha fields. Several new wells were completed which assisted the over-all county petroleum production to gain over the 1960 volume.

Uranium	
Sand and Gravel	$ 97,408
Petroleum	5,283,817
Gas	1,033,770
Total	$ 6,317,587
TOTAL PRODUCTION FOR COUNTY	$ 6,414,995

MONTEZUMA (4) *CORTEZ

Area 2,097 square miles

6 mines, projects, oil and gas wells—214 men

New wells and new discoveries in the Towaoc Desert Canyon and Flodine Park fields, located in the Paradox Basin area, were responsible for increased production of both oil and gas in Montezuma County. Considerable drilling activity was evident all year in the Desert Canyon area and along the Utah border towards the Aneth field. Work continued on the new highway between Cortez and the Four Corners area. Colorado Carbonics Company maintained a steady production of carbon dioxide gas, from the McElmo field, which was converted into dry ice. Placer operations were conducted part of the year by the Ripple & Baby Bear Mining Company south of Rico. Other operations in the county were on the Brownville group east of Mancos, on the Red Arrow group, Gold Run Nos. 1, 2, 3, and 4, and on the Hazel-Lu. The operators of these properties were Gene Crawford, the First National Oil & Minerals Company, Warren Lyen, and John & Albert Lyen, respectively.

Uranium	
Vanadium	
Sand and Gravel	$ 81,765
Petroleum	229,334
Gas	22,571
Total	$ 251,905
TOTAL PRODUCTION FOR COUNTY	$ 333,670

---

*County seats

MONTROSE (4) *MONTROSE

Area 2,240 square miles
214 mines, 1 plant, projects—1,784 men

For the eleventh consecutive year Montrose County has been the State's leading uranium producer. Most all of the major uranium producers have properties in the west end of the county, some of which are Union Carbide Nuclear Company, Vanadium Corporation of America, Climax Uranium Company, Worcester Mines, Golden Cycle Corporation, and many others. The only processing mill in the county is located at Uravan, Colorado, and is operated by the Union Carbide Nuclear Company on tonnage from company and other mines on the Colorado Plateau. Vanadium Corporation of America maintained a purchase and collection plant at Naturita and these ores are shipped to their processing plant in Durango. Many carnotite mines in the county, thought to be worked out several years ago, are still producing substantial amounts of ore on deposits and have proved to be extended and continuous. In many cases ore has been developed on lower levels, which has doubled and tripled the original estimated recoverable ore tonnage. Considerable development drilling has been done this year in areas surrounding proven ore bodies. This drilling has also added potential tonnage to many properties. The principal producing areas are Long Park, Monogram Mesa, Bull Canyon, Paradox Valley, Carpenter Flats, Atkinson Mesa, and Martin Mesa. Montrose County also produced sand and gravel and stone for highway and building construction. During the year oil well drilling was in progress on Wray Mesa and on the San Miguel River northeast of Naturita.

Uranium		
Vanadium		
Sand and Gravel	$	151,272
Gas	$	2,460
TOTAL PRODUCTION FOR COUNTY	$	153,732

MORGAN (1) *FORT MORGAN

Area 1,300 square miles
Oil and gas wells—350 men

During the year the Colorado Oil & Gas Conservation Commission set a production limit of 22,000 barrels of oil and 25,173,000 cubic feet of gas per day on Adena, Colorado's second largest producing field. Oil activity in the county continued with many completions. Three hundred five producing

---

*County seats

wells were recorded in 1960.

Sand and Gravel	$ 113,709
Petroleum	26,971,693
Gas	1,497,315
Total	$ 28,469,008
TOTAL PRODUCTION FOR COUNTY	$ 28,582,717

OURAY (4) *OURAY

Area 540 square miles
13 mines, 2 plants, projects—248 men

Of significant importance to Ouray County in 1960 was the erection and completion of the new 500-ton selective flotation mill by Western Knapp Engineering Company for Camp Bird-Colorado, Inc. on the site of the old cyanide and gravity mill. The mill was completed and test runs started late in October on ores which had been stockpiled. Ore blocking and development work on the Pierson and Camp Bird veins has been continuous during the year. The Francis Mill in the Sneffles District was completed during 1960 and satisfactory test runs on Ruby Trust and other ores were continued late in the year. Other Ouray County operators were the American Nettie, Atlas, Bachelor, Keeno, Monarch and Rouville. Service and supply operations for the Idarado Mining Company were maintained at the Treasury Tunnel portal during the year. Their main office, shops and warehouse, as well as a portion of the 200 employees, added materially to the economy of Ouray County. Ore mined in this two-county operation is milled in the company's Pandora Mill at Telluride.

Gold	$ 171,670
Silver	147,680
Copper	415,912
Lead	621,319
Zinc	978,983
Total	$ 2,335,564
Sand and Gravel	$ 6,000
TOTAL PRODUCTION FOR COUNTY	$ 2,341,564

---

*County seats

PARK (1 and 2) *FAIRPLAY

Area 2,178 square miles
6 mines, projects--219 men

Park County, like many other early day gold, silver, lead and zinc producing counties, is expanding through production of other mineral products. In addition to several operating gold placer properties, beryl and tungsten, as well as sand and gravel are fast becoming major products. Beryl ore from the Boomer and Red Skin Mines, operated by the U. S. Beryllium Company, was mined during the year. Some ore was stockpiled and some shipped to Mineral Concentrates Company at Loveland where it was reduced to beryllium oxide. The D M F Company, operators of the Betty Mine, a lead-silver-copper mine, did experimental work with a portable mill. Transmount Mining Ventures, Inc. shipped a carload of ore to a Boulder County milling plant.

Beryllium	$	295,450
Sand and Gravel	$	3,100
TOTAL PRODUCTION FOR COUNTY	$	298,550

PITKIN (3) *ASPEN

Area 975 square miles
4 mines, gravel—27 men

For the first time in several years signs of mining activity were evident in this once large mining county. Montezuma Industries were developing ore reserves at the Montezuma Mine, six miles southwest of Ashcroft. Charles Howie conducted exploration work for lead-silver ore at the Star No. 1 on the west side of Independence Pass. Morrison Knudsen, contractors for the Pitkin Iron Corporation, completed roads and stripping operations and some iron ore was shipped during 1960 from the open pit above Ashcroft. The Utex Exploration Company started oil drilling operations at No. 1 Cal, located in Northeast Northwest Section 28, Township 8 South, Range 90 West, Pitkin County, with results unannounced at this time.

Silver	$	1,000
Copper		150
Lead		600
Zinc		50
Iron		27,000
Total	$	28,800
Sand and Gravel	$	1,750
TOTAL PRODUCTION FOR COUNTY	$	30,550

---

*County seats

PUEBLO (2) *PUEBLO

Area 2,414 square miles

7 mines, projects—98 men

Five clay mines and one uranium mine added to Pueblo County's mineral economy during the year. The Chamblin, Miller Freeman, and Nellie Helen were operated by the Standard Fire Brick Company, Raymond Moore and Arthur Wanz, respectively. General Refractories No. 2 and 5, open pit mines, were clay producers in 1960. Cotter Corporation at Canon City operated the Kathryn uranium mine two miles south of Fort Carson and some production was recorded. Sand and gravel production was a major mineral product for the county.

Uranium	
Sand and Gravel	$ 139,340
Clay	196,582
TOTAL PRODUCTION FOR COUNTY	$ 335,922

RIO BLANCO (3) *MEEKER

Area 3,264 square miles

5 mines, projects, oil and gas—532 men

Uranium development with some production from five mines located twenty-two miles northeast of Meeker in the Uranium Peak area, contributed mineral production to Colorado's top mineral producing county. Rangely field located in northwest Rio Blanco County continued to hold first place in petroleum production in the State. Under direction of the California Company, operators of the unitized Webber field, water flooding operations continued which will eventually stabilize production from the field. Wesco Refining Company had a steady operation at its 1,700-barrel-per-day refinery. New discoveries and production were listed at the Dragon Trail, Pinnacle, and Wilson Creek fields.

Uranium	
Vanadium	
Sand and Gravel	$ 8,800
Petroleum	57,429,175
Gas	6,580,113
Total	$ 64,009,288
TOTAL PRODUCTION FOR COUNTY	$ 64,018,088

---

*County seats

RIO GRANDE (3) *DEL NORTE

Area 916 square miles

1 mine, projects—17 men

In addition to oil exploration and sand and gravel activities, exploration and development work was started at the Reynolds Tunnel, twenty-seven miles southwest of Del Norte at Summitville. This property was formerly a heavy gold, silver and copper producer and is owned by the Reynolds Morse Corporation and Ben Poxson. John Riggs of Denver is the present operator. Most work so far consists of reopening old workings and reconditioning old buildings and roads.

Sand and Gravel	$	1,200
TOTAL PRODUCTION FOR COUNTY	$	1,200

ROUTT (3) *STEAMBOAT SPRINGS

Area 2,331 square miles

Quarries, projects, oil and gas—129 men

Volcanic scoria used for railroad ballast and the manufacture of light weight building blocks was produced from the McCoy Cinder Pit operated by the McCoy Aggregate Company, four miles northeast of McCoy. Petroleum production came from several fields in the county which include the Curtis and Tow Creek fields. The New Sage and Grass Creek fields continued to produce from the Niobrara formation. Several new wells in the county were successfully completed and development and wildcat activity continued.

Sand and Gravel	$	3,250
Scoria		23,426
Total	$	26,676
Petroleum		310,242
Gas		3,709
Total	$	313,951
TOTAL PRODUCTION FOR COUNTY	$	340,627

SAGUACHE (3 and 4) *SAGUACHE

Area 3,146 square miles

13 mines, 4 plants, projects—175 men

Saguache County, separated by the Continental Divide, has enjoyed some base metal mining on the east slope and uranium mining on the west slope for the past several years. Mining operations of the Gunnison Mining Company at their Los Ochos Group, Pinnacle Exploration Company at their Pitch Tunnel, and Gibraltar Minerals Company at their new Lookout Mine were the major uranium producers in 1960. All of these operations are on the west slope of the county. Ores from these mines were milled at the Gunnison Mining Company mill at Gunnison and at the Cotter Corporation mill at Canon City. Operators on the east slope were the Superior Mines Company, Gendev Mining Corporation, Monon Leasing Company, Rico Mining Company, Tom Amer, Joseph D. Blunt, and the Villa Grove Turquoise Company. Operations at the S. & S. Milling Company plant continued until late in the year. Some lead-zinc-silver production was noted on the east slope. Work on highway 114 by the Gardner Construction Company in the Cochetopa Pass area was in progress during the year.

---

*County seats

Uranium		
Sand and Gravel	$	5,093
Turquoise		16,360
TOTAL PRODUCTION FOR COUNTY	$	21,453

SAN JUAN (4) *SILVERTON

Area 392 square miles

22 mines, 3 plants, project—183 men

Mining activities in San Juan County in 1960 experienced a return to near normal with the exception of production. Through the development and exploration work conducted by Standard Metals, Inc. at the Gold King, or American Tunnel, the Shenandoah and Letter G properties and the reconditioning of the Mayflower Mill, Silverton's economy was materially helped. The American Tunnel was enlarged and lengthened beyond the 9,500-foot station and plans are to connect this tunnel by means of a raise to the old Sunnyside workings. The Shenandoah Mill was operated during the year on company and custom ores. The Denver-Golden Corporation continued operations at the Burbank Tunnel and some production was noted from both the Pride and Lackawanna Mills. Other operations were conducted at the Auburn Group, Blackhawk, Burbank Tunnel, Clear Lake, Columbus, Elk Park, Graysill Group, Katy, Little Giant, Little Ida, Rabbit Placer, Longfellow Shaft, Osceola, Queen Ann, Rainbow, or Brooklyn,

---

*County seats

Silent Friend, Silver Wing and Sultan Tunnels.

Gold	$ 79,864
Silver	100,659
Copper	227,170
Lead	185,428
Zinc	37,212
Total	$ 630,333
Sand and Gravel	$ 7,600
TOTAL PRODUCTION FOR COUNTY	$ 637,933

SAN MIGUEL (4) *TELLURIDE

Area 1,284 square miles

85 mines, 2 plants, quarry, projects—1,056 men

The Idarado Mining Company's Idarado Mine operations east of Telluride continued to be the largest producer of silver, copper and lead in the State. Their operations, extending from Red Mountain to Telluride, have produced a record amount of tonnage from San Miguel and Ouray Counties, and this ore was processed in their modern plant at Pandora. Careful planning and economical operating procedures have enabled this company to operate despite fixed prices on gold and silver and high commodity costs. County uranium production continued high from the Slick Rock, Egnar, Bull Canyon and Gypsum Valley areas. Much of this uranium ore was treated at the Union Carbide Nuclear Company plant at Slick Rock. Petroleum exploration continued during the year with major gas discoveries reported in the Egnar and other areas. Of interest to this department was the completion of one year without a lost-time injury at the Union Carbide Nuclear Company's Burro properties at Slick Rock.

Gold	$ 524,440
Silver	443,025
Copper	1,234,597
Lead	1,714,690
Zinc	2,816,297
Uranium	
Vanadium	
Total	$ 6,733,049
Sand and Gravel	129,144
Stone	15,000
Total	$ 144,144
TOTAL PRODUCTION FOR COUNTY	$ 6,877,193

---

*County seats

SUMMIT (3) *BRECKENRIDGE

Area 616 square miles

4 mines, 2 plants, projects—567 men

Blue River Constructors, Inc., contractors for the Harold D. Roberts diversion tunnel, holed through between the shaft and the Dillon entry on January 2 and made the final connection between the shaft and the Grant entry on February 24. This entire twenty-three mile tunnel was driven without a fatal accident, which is a great credit to the contractors. Concreting the entire tunnel was started in August and this work will be completed early in 1962. Brown Construction Company holed through on the McCullough Tunnel during the last half of the year and cleanup and concreting operations continued throughout 1960. F. H. Linneman completed driving the Dillon Dam diversion tunnel this year and work continued on concreting and gate-valve raise driving. Abutment and base excavating was started on the Dillon high dam by Potashnick Construction Company. Several placer and lode mining operations were evident in the county during the year. C. Ryan and Son operated the Climax Sand & Gravel plant above Kokomo.

Gold	$	1,000
Sand and Gravel	$	316,720
TOTAL PRODUCTION FOR COUNTY	$	317,720

TELLER (2) *CRIPPLE CREEK

Area 555 square miles

8 mines, 1 plant, quarries—120 men

Mining operations in Teller County were again subnormal and gold production in the county was very little different from the 1959 figure. Golden Cycle Corporation operated the Ajax and Theresa Shaft mines. The Deadwood Leasing Company operated the Deadwood property. Peiffer and Company operated the Grace Greenwood and John Robush operated the Little May. The Mollie Kathleen operated as both a tourist mine and a producing mine. All ore was milled in the Golden Cycle Carlton Mill located between Cripple Creek and Victor. Granite for monumental uses was produced by the Pikes Peak Granite Company and exploratory drilling is in progress in the High Park area. Other operators in the county were Frank H. Norberg, Herb Crisler and Alpen

---

*County seats

Meadows, Inc.

Gold	$ 1,095,169
Sand and Gravel	1,164
Stone	8,485
Peat	15,000
Total	$ 24,649
TOTAL PRODUCTION FOR COUNTY	$ 1,119,818

WASHINGTON (1) *AKRON

Area 2,530 square miles
Petroleum—240 men

Petroleum production again this year should keep this county in the top six for the State. Several new wells were completed northeast of Lyndon and several wells were drilled on the south side of highway 36.

Sand and Gravel	$ 122,362
Petroleum	23,289,816
Gas	463,195
Total	$ 23,753,011
TOTAL PRODUCTION FOR COUNTY	$ 23,875,373

WELD (1) *GREELEY

Area 4,033 square miles
Petroleum—68 men

One hundred nineteen producing wells were recorded in Weld County during 1960 and 1,583,804 barrels of crude oil were produced. The county was sixth in petroleum production, led by Rio Blanco, Morgan, Washington, Logan and Moffat Counties.

Sand and Gravel	$ 324,140
Petroleum	4,593,032
Gas	269,244
Total	$ 4,862,276
TOTAL PRODUCTION FOR COUNTY	$ 5,186,416

NOTE: County mineral production mentioned or listed without a value has been placed in the State's total mineral production on page 16.

Safety Awards

Safety Awards have been issued to the following operators who have completed the year 1960 without a lost-time accident and who have exceeded 30,000 man-hours of employment during the year:

American Smelting & Refining Company—Globe Plant
The California Company—Weld County Operations
Douglas Cleghorn—Joe & Sandy Mine
General Chemical Division, Allied Chemical Corporation —Valmont Mill
Golden Cycle Corporation—Carlton Mill
Gunnison Mining Company—Gunnison Mill
Harrison Construction Company—Highway Construction
Idarado Mining Company—Mill Department
Idarado Mining Company—Shop Department
Mountain Fuel & Supply Company—Hiawatha Oil Field
Calvin C. Sanders--Long Park Nos. 6 & 12 Mine
Texaco Inc.—Wilson Creek Oil Field
Trace Elements Corporation—Maybell Mill
Trace Elements Corporation—Mining Division
Union Carbide Nuclear Company—Burro Nos. 3, 5, 7 Mine
Union Carbide Nuclear Company—Paradox Nos. 5 & 6 Mine

Awards of Merit have been issued to the following operators, some of which had no lost-time accidents during the year but had insufficient man-hours to qualify for a Safety Award. This award is given to large and small operators alike in appreciation of outstanding effort and cooperation in the field of Safety during the year.

C. N. Athey—Opera Box Group
Atlas Well Service
Barnes Brothers—First National Bank Mine
Delbert Burbridge—Little Dick Mine
Climax Uranium Company—G-3 Mine
Colorado Fuel & Iron Corporation—Monarch Lime Quarry & Plant
Colorado Granite Grits Inc.—Mining Operations
Wesley D. Conda—Church Quarry
Cooley Gravel Company—Denver Operations
Cotter Corporation—Cotter Mill
Deadwood Leasing Company—Deadwood Mine

Hoyt Deaver & Son—Trace Elements Pits
Denver Brick & Pipe Company—Clay Mining Operations
Denver Fire Clay Company—Two Brothers & Black Silica Quarries
Empire Zinc Division, The New Jersey Zinc Company—Canon City Plant
Fibreboard Paper Products Company—Coaldale Quarry
General Chemical Division, Allied Chemical Corporation—Burlington Mine
General Chemical Division, Allied Chemical Corporation—Denver Works
Golden Cycle Corporation—Theresa Shaft
Herren & Strong—Highway Construction
Ideal Cement Company—Boettcher Quarry
Ideal Cement Company—Portland Quarry
Javernick, Javernick & Borgenson—Mill No. 2 Mine
E. J. Johannsen & Elwood Kelly—Deluxe Mine
Mountain Fuel & Supply Company—Powder Wash Oil Field
Mountain Fuel & Supply Company—Sugar Loaf Oil Field
Ernest W. Munroe—Munroe Plant & Goodwin Quarry
Nielson, Inc.—Highway Construction
George W. Parfet Estate, Inc.—Rockwell & Green Mountain Quarries
William R. Pierce—Long Park No. 1 Mine
DeVar Shumway—Plateau Operations
Paul Smith & Oran Thompson—Merry Widow Mine
Dale Souther—Sunbeam Mine
Lowell Staats—Carnation Mine
Sterling Sand & Gravel Company—Larimer County Operations
Stocklasa, Blake, & Power—Big Dick & Buckshot Mines
Texaco Inc.—Hamilton Area
U. S. Beryllium Company—Boomer & Red Skin Mines
Union Carbide Nuclear Company—Capella Mine
Union Carbide Nuclear Company—Eula Belle Mine
Union Carbide Nuclear Company—Mining Department
United States Gypsum Company—Loveland Works
Utex Exploration Company—Cash, Rex & Victoria Mines
Western Feldspar Milling Company—Western Feldspar Mill
Worcester Mines—Worcester Mine

Injuries

A substantial reduction of lost-time injuries in the mineral industry occurred in 1960, despite the fact that more men were employed. Severity of injuries received was increased due to sixteen fatal accidents, which were three more than in 1959. Ten of the fatals occurred in District No. 4, where a major part of the State's operating properties are located. Underground injuries decreased by 20% in 1960 and surface injuries increased by 15%. In general, continued improved cooperation between the operators, employees and the Bureau of Mines has resulted in decreasing accidents in the industry. Most of the sixteen fatal accidents were caused by carelessness on the part of either management or the injured.

Six fatal accidents occurred underground, or one for every 802 men working or for every 1,635,600 man-hours worked. Three fatals occurred at mine surface or one for every 1,153 men working or for every 1,647,266 man-hours worked. Four fatals occurred on State and Federal projects or one for every 409 men working or one for every 981,000 man-hours worked. Three fatals occurred at oil and gas well drilling operations or one for every 750 men working or for every 2,360,000 man-hours worked. One fatal occurred for every 932 men working in the mineral industry or one for every 2,255,800 man-hours worked.

All of the above accidents were personally investigated by the inspector for the district in which the accident occurred and a complete written report was filed in this office. Corrective orders were issued to the employer for the purpose of eliminating a re-occurrence of a similiar accident and these recommendations were passed on to the other inspectors for their future use.

SUMMARY OF INJURIES

	Total Man-Hours	Fatal Injuries	Lost-Time Injuries	Number of Lost Days	Frequency Rate Per One Million Man-Hours	Severity Rate Per One Million Man-Hours
Mines, Underground	9,813,600	6	433	42,061	44.1	4,285.
Mines, Surface	4,948,800	3	175	19,443	35.3	3,928.
Quarries-Pits	1,152,000	0	16	84	13.8	72.
Mill-Plants-Smelters	8,853,600	0	97	1,128	10.9	127.
State & Federal Projects	3,924,000	4	159	25,875	40.5	6,596.
Oil & Gas Industry	7,080,000	3	190	19,363	26.8	2,734.
Totals	35,772,000	16	1,070	107,954	29.9	3,017.

This table includes the loss of 96,000 days due to 16 fatalities and 3,740 days due to 17 permanent partial disabilities.

$$\text{Frequency Rate} = \frac{\text{Number of Injuries} \times 1{,}000{,}000}{\text{Number of Man-Hours of Exposure}} \qquad \text{Severity Rate} = \frac{\text{Total Time Charges in Days} \times 1{,}000{,}000}{\text{Number of Man-Hours of Exposure}}$$

INJURIES BY DISTRICTS

	Fatals	Mines, Under-ground	Mines, Surface	Quarries-Pits	Mills-Plants-Smelters	Projects	Oil	Totals
District 1	0	20	6	9	13	37	52	137
District 2	2	11	6	4	4	37	4	66
District 3	4	116	56	3	38	73	96	382
District 4	10	286	107	0	42	12	38	485
	16	433	175	16	97	159	190	1,070

FATAL INJURIES

Mines, Underground

Date	Name	Age	Employed By	County	Cause of Injury
2-2-60	Oscar B. Poyer	40	Dulaney Mining Co.	San Miguel	Premature blast. Poyer had completed lighting seventeen loaded holes in a shallow incline shaft. While putting on his gloves the first shot fired. Investigation revealed one fuse had been cut short. Improper blasting procedure.

4-15-60 4-15-60	Louis M. Jones Walter Davis	62 29	Rico Argentine Mining Co. Rico Argentine Mining Co.	Dolores Dolores	Both men were hit by a five ton slab falling from the roof of a stope. Both were knocked to the bottom of a 30-foot raise and covered with rock. Improper raise construction. Failure to properly support ground.
5-16-60	Robert E. Durfee	24	Model Mining Co.	Mesa	Durfee was in the act of lighting thirty-two loaded holes with lead spitter not detached from the roll. Required second man was not present. Improper blasting procedure.
8- 4-60	Lester L. McCloughan	37	Col-Tex Mining Inc.	Hinsdale	While carrying a box of powder down a shaft ladder, McCloughan slipped and fell to level below where he rolled into an open ore pass. Safety rule infraction and improper safeguards.
11- 4-60	Paul D. Rice	50	Warren Kuykendall	Montrose	Lighted a 23-hole round with lead spitter not removed from the roll. Required second man was not assisting. Round detonated before lighting was completed. Improper blasting procedure.

Mines, Surface

4- 4-60	Stanley R. Thompson	26	V.C.A. Strawberry Roan	San Miguel	Intermittent drilling and blasting was being done under the rim of the mesa when a large 100-ton rock broke loose and fell on Mr. Thompson. Improper safeguards.
11-17-60	Jack R. Beye	20	U.C.N.C. John D. Moon	Moffat	Beye was driving a Euclid scraper out of a uranium pit when the scraper went over the bank and crashed to pit bottom. Cause undetermined.

12-16-60	Herbert F. McComber	57	Seacol Inc.	Fremont	A superintendent operating a hoist on the surface of an incline. Hoist was in the open and the operating platform was covered with ice and snow. McComber slipped and fell into the hoist. Improper safeguards and precautions.

Projects

3-14-60	Albert H. Davies	57	Blue River Constructors	Park	Crushed under a 12-inch water line when the same broke loose from the rib of the Roberts Tunnel after a blast. Insufficient pipe support.
7-16-60	Harold Elenga	43	Seigrist Construction Co.	Delta	Operating a front end loader on hillside road. Loader went over the bank and Elenga jumped, resulting in his being crushed beneath loader bucket. Exact cause undetermined.
8-17-60	William M. Boughner	25	Linneman Construction Co.	Summit	Driving dumpster down a steep hill that was slippery from recent snow. Dumpster skidded out of control and slipped over a bank, crushing Boughner. Improper safety precautions.
10- 5-60	Joseph F. Claunch	40	Z. H. & W. H. Lowdermilk Construction Co.	Routt	Driving a Euclid scraper when the same skidded sideways and turned over, crushing Claunch. Exact cause undetermined.

Oil

4-10-60	Joseph V. Sigurnik	31	Moab Drilling Co.	Rio Blanco	Hit on the head with a falling tong head. Improper safeguards and procedure.

6-17-60	Buddy Havins	28	Halliburton Oil Well Co.	La Plata	Removing cap from pipe so that the plug could be driven farther into pipe when plug blew out, hitting Havins in head. He fell to floor fifteen feet below. No safety belt. Improper safety precautions.
8- 4-60	Irving B. McCormick	54	Moran Brothers Inc.	La Plata	Attempting to start a gasoline starter engine when it backfired, igniting gasoline spilled on McCormick. Also ignited the gasoline tank which was uncovered. Improper safeguards and carelessness.

Injury Statistics

MINES, UNDERGROUND

Agency Causing Injury	Fatals	Temporary Injuries Loss of one day or more	
Atmosphere		3	
Bars—Bins—Chutes		3	
Belts—Conveyors—Pulleys		1	
Cables—Hose—Ropes		14	
Cars—Motors—Vehicles	1	85	
Chains—Gears—Sprockets		3	
Chemicals		1	
Containers		4	
Doors—Windows—Gates		2	
Drills—Drilling Equipment		9	
Dust and Particles		8	
Electricity—Elec. Equipment		6	
Explosives, Loading or Firing		4	
Falls—Floor—Ice—Snow		15	
Flames—Fire—Hot Substances		2	
Hoists—Hoisting Apparatus		5	
Ladders—Manways	1	12	
Machinery—Tools		70	
Materials		2	
Metal Objects		24	
Platforms—Staging—Scaffolds		5	
Premature or Delayed Blasts	2	2	
Rock—Ore—Ground	2	109	
Screens		3	
Shovels, Power		1	
Timber—Lumber—Poles		28	
Tracks		4	
Unclassified—Insufficient Data		2	
Totals	6	427	433
Type of Injury			
Burns—Shock		3	
Caught in or between		90	
Fall on same level		14	
Fall on different level	1	19	
Handling		89	
Inhalation—Suffocation		9	
Slip—Stepping on		26	
Striking against—Struck by	5	178	
Unclassified—Insufficient Data		4	
Totals	6	432	438

INJURY STATISTICS—(Continued)

	Fatals	Temporary Injuries Loss of one day or more	
Nature of Injury			
Amputations		6	
Burns—Scalds—Shock		2	
Cuts—Bruises—Lacerations—Punctures		217	
Foreign Bodies		13	
Fractures	6	75	
Hernia		8	
Occupational Diseases		4	
Respiratory		6	
Strains—Sprains—Dislocations		126	
Nature Unknown		2	
Totals	6	459	465
Site of Injury			
Eyes		18	
Head—Face—Neck		34	
Trunk	2	129	
Upper Extremities		155	
Lower Extremities		144	
General	4	6	
Insufficient Data		1	
Totals	6	487	493

MINES, SURFACE

	Fatals	Temporary Injuries
Agency Causing Injury		
Bars—Bins—Chutes		3
Cables—Hose—Ropes		5
Cars—Motors—Vehicles		5
Chains—Gears—Sprockets		2
Containers		3
Drills—Drilling Equipment		14
Dust and Particles		5
Electricity—Elec. Equipment		1
Explosives, Loading or Firing		1
Falls—Floor—Ice—Snow		14
Falling or Flying Objects		3
Flames—Fire—Hot Substances		4
Hoists—Hoisting Apparatus	1	
Ladders—Manways		2
Machinery—Tools	1	25
Materials		2

INJURY STATISTICS—(Continued)

	Fatals	Temporary Injuries Loss of one day or more	
Metal Objects		28	
Platforms—Staging—Scaffolds		1	
Premature or Delayed Blasts		3	
Rock—Ore—Ground	1	25	
Screens		2	
Shovels, Power		1	
Timber—Lumber—Poles		12	
Tracks		6	
Unclassified—Insufficient Data		5	
Totals	3	172	175
Type of Injury			
Burns—Shock		5	
Caught in or between		9	
Fall on same level	1	6	
Fall on different level		5	
Handling		46	
Inhalation—Suffocation		2	
Slip—Stepping on		18	
Striking against—Struck by	2	78	
Unclassified—Insufficient Data		3	
Totals	3	172	175
Nature of Injury			
Amputations		3	
Burns—Scalds—Shock		5	
Cuts—Bruises—Lacerations—Punctures		61	
Foreign Bodies		11	
Fractures	3	26	
Hernia		4	
Respiratory		1	
Strains—Sprains—Dislocations		60	
Nature unknown		1	
Totals	3	172	175
Site of Injury			
Eyes		17	
Head—Face—Neck	1	10	
Trunk		64	
Upper Extremities		33	
Lower Extremities		53	
General	2	1	
Totals	3	178	181

INJURY STATISTICS—(Continued)

QUARRIES

	Fatals	Temporary Injuries Loss of one day or more
Agency Causing Injury		
Cars—Motors—Vehicles		2
Drills—Drilling Equipment		1
Flames—Fire—Hot Substances		1
Machinery—Tools		1
Metal Objects		2
Rock—Ore—Ground		8
Timber—Lumber—Poles		1
Total		16
Type of Injury		
Burns—Shock		1
Caught in or between		1
Fall on same level		1
Handling		6
Striking against—Struck by		7
Total		16
Nature of Injury		
Burns—Scalds—Shock		1
Cuts—Bruises—Lacerations—Punctures		8
Fractures		2
Strains—Sprains—Dislocations		6
Total		17
Site of Injury		
Head—Face—Neck		1
Trunk		8
Upper Extremities		4
Lower Extremities		4
General		1
Total		18

MILLS—PLANTS—SMELTERS

	Fatals	Temporary Injuries Loss of one day or more
Agency Causing Injury		
Atmosphere		3
Bars—Bins—Chutes		5
Belts—Conveyors—Pulleys		4
Cars—Motors—Vehicles		2
Chemicals		4

INJURY STATISTICS—(Continued)

	Fatals	Temporary Injuries Loss of one day or more
Containers		3
Dust and Particles		4
Electricity—Elec. Equipment		2
Falls—Floor—Ice—Snow		15
Flames—Fire—Hot Substances		4
Hoists—Hoisting Apparatus		1
Ladders—Manways		2
Machinery—Tools		13
Materials		7
Metal Objects		16
Platforms—Staging—Scaffolds		1
Rock—Ore—Ground		2
Timber—Lumber—Poles		7
Tracks		2
Total		97
Type of Injury		
Burns—Shock		8
Caught in or between		13
Fall on same level		2
Fall on different level		13
Handling		18
Inhalation—Suffocation		11
Slip—Stepping on		12
Striking against—Struck by		21
Total		98
Nature of Injury		
Burns—Scalds—Shock		9
Cuts—Bruises—Lacerations—Punctures		31
Foreign Bodies		5
Fractures		11
Hernia		2
Occupational Diseases		6
Respiratory		3
Strains—Sprains—Dislocations		31
Total		98
Site of Injury		
Eyes		10
Head—Face—Neck		4
Trunk		38

INJURY STATISTICS—(Continued)

	Fatals	Temporary Injuries Loss of one day or more	
Upper Extremities		15	
Lower Extremities		27	
General		6	
Total		100	

PROJECTS

Agency Causing Injury

	Fatals	Temporary Injuries Loss of one day or more	
Bars—Bins—Chutes		5	
Belts—Conveyors—Pulleys		1	
Cables—Hose—Ropes		8	
Cars—Motors—Vehicles	2	18	
Chains—Gears—Sprockets		2	
Chemicals		1	
Doors—Windows—Gates		1	
Drills—Drilling Equipment		3	
Dust and Particles		4	
Electricity—Elec. Equipment		3	
Explosives, Loading or Firing		1	
Falls—Floor—Ice—Snow		9	
Flames—Fire—Hot Substances		1	
Ladders—Manways		1	
Machinery—Tools	1	28	
Materials		7	
Metal Objects		17	
Platforms—Staging—Scaffolds		2	
Premature or Delayed Blasts	1		
Rock—Ore—Ground		20	
Shovels, Power		1	
Timber—Lumber—Poles		7	
Tongs		1	
Tracks		14	
Totals	4	155	159

Type of Injury

	Fatals	Temporary Injuries Loss of one day or more	
Burns—Shock		6	
Caught in or between		19	
Fall on same level		8	
Fall on different level	1	7	
Handling		47	
Inhalation—Suffocation		2	
Slip—Stepping on		14	
Striking against—Struck by	3	52	
Totals	4	155	159

INJURY STATISTICS—(Continued)

	Fatals	Temporary Injuries Loss of one day or more	
Nature of Injury			
Amputations		3	
Burns—Scalds—Shock		8	
Cuts—Bruises—Lacerations—Punctures	2	65	
Foreign Bodies		8	
Fractures	2	36	
Hernia		2	
Occupational Diseases		2	
Respiratory		1	
Strains—Sprains—Dislocations		41	
Totals	4	166	170
Site of Injury			
Eyes		14	
Head—Face—Neck	2	18	
Trunk		59	
Upper Extremities		35	
Lower Extremities		44	
General	2	3	
Totals	4	173	177

OIL WELLS

Agency Causing Injury		
Belts—Conveyors—Pulleys		1
Cables—Hose—Ropes		2
Cars—Motors—Vehicles		5
Chains—Gears—Sprockets		8
Containers		1
Derricks—Headframes		1
Drills—Drilling Equipment	1	42
Dust and Particles		2
Electricity—Elec. Equipment		1
Explosives—Transportation		6
Falls—Floor—Ice—Snow		20
Falling or Flying Objects		1
Flames—Fire—Hot Substances	1	5
Ladders—Manways		1
Machinery—Tools		25
Materials		4
Metal Objects	1	35
Platforms—Staging—Scaffolds		2
Rock—Ore—Ground		5

INJURY STATISTICS—(Continued)

	Fatals	Temporary Injuries Loss of one day or more	
Screens		1	
Timber—Lumber—Poles		3	
Tongs		14	
Tracks		1	
Unclassified—Insufficient Data		1	
Totals	3	187	190
Type of Injury			
Burns—Shock	1	11	
Caught in or between		43	
Fall on same level		6	
Fall on different level		9	
Handling		26	
Inhalation—Suffocation		1	
Slip—Stepping on		5	
Striking against—Struck by	2	92	
Unclassified—Insufficient Data		1	
Totals	3	194	197
Nature of Injury			
Amputations		6	
Burns—Scalds—Shock	1	12	
Cuts—Bruises—Lacerations—Punctures		111	
Foreign Bodies		4	
Fractures	2	36	
Strains—Sprains—Dislocations		41	
Totals	3	210	213
Site of Injury			
Eyes		8	
Head—Face—Neck	2	33	
Trunk		51	
Upper Extremities		68	
Lower Extremities		50	
General	1		
Totals	3	210	213

Men Employed

Employment in Colorado's mineral industry showed a slight increase in 1960 over 1959. There were 14,905 men employed, or a gain of 101 over last year. There were fifteen more individual mining operations in 1960 which indicates some more development and prospecting activity. Actual employment in underground mining diminished by ninety-one men, which indicates again that as men were laid off in the larger operations they immediately began operations on their own property or lease. Employment in surface mining and oil drilling activity increased some, with a reduction indicated in project labor or State and Federal projects. Continued high costs of operation with fixed mineral prices were responsible again for below-normal activity in base metal mining.

	Mines		Mills, Plants, Smelters		Quarries & Pits		*Placers		Projects		Oil Wells	Totals
	No.	Men	No.	Men	No.	Men	No.	Men	No.	Men	Men	Men
District 1	98	405	29	359	35	232	20	293	5	231	1,270	2,790
District 2	46	229	3	105	14	176	3	235	3	197	295	1,237
District 3	41	1,556	10	1,660	11	57	2	195	12	714	920	5,102
District 4	422	3,030	24	1,565	3	15	3	208	18	493	465	5,776
Totals	607	5,220	66	3,689	63	480	28	931	38	1,635	2,950	14,905

*Sand & Gravel employment included with placer operations

TOTAL MEN EMPLOYED

	Underground	Surface	Oil Wells	Totals
District 1	359	1,161	1,270	2,790
District 2	297	645	295	1,237
District 3	1,854	2,328	920	5,102
District 4	2,297	3,014	465	5,776
Totals	4,807	7,148	2,950	14,905

MEN EMPLOYED IN

Gold, Silver, Copper, Lead, Zinc	Molybdenum	Uranium	Oil Wells	Other	Total
950	1,900	5,000	2,950	4,105	14,905

DIVISION OF OPERATIONS

Base and Precious Metal Mines	40
Uranium Mines	485
Other Mines	82

First Aid Training

Six hundred fifty-two men in Colorado's mineral industry were trained in first aid during 1960.

Inspections

An increase in the number of mining operations and a slight decrease in the number of oil well drilling operations resulted in a net gain of twenty-one mineral operations or a total of 964 properties and oil wells inspected in 1960. Better access roads and a part-time transfer of a District 3 inspector to District No. 4 was responsible for an increase of 210 more inspections in 1960 or a total of 1,482 complete inspections and reports. Properties where safety conditions were sub-standard were inspected several times and all properties were inspected at least once during the year. Better than an average of 1.5 inspections were made each working day by each inspector.

INSPECTIONS

Made By

1960	District 1 Blake	District 2 Theobald	District 3 Doyle & Keating	District 4 Ray & Pakka	Total
January	10	12	27	44	93
February	16	7	19	45	87
March	23	0	29	35	87
April	29	24	13	49	115
May	15	0	40	62	117
June	48	8	59	101	216
July	23	12	50	53	138
August	24	0	56	65	145
September	40	0	16	69	125
October	29	9	43	66	147
November	28	5	17	52	102
December	41	5	9	55	110
Totals	326	82	378	696	1,482

	Mines	Mills Plants Smelters	Pits & Quarries	Placers & Bogs	Oil & Gas Wells, Plants	Projects Road	Projects Tunnel	Projects Dam	Total
District 1	137	52	49	4	60	20	4	....	326
District 2	41	3	24	3	7	3	1	....	82
District 3	92	50	32	5	127	14	48	10	378
District 4	567	41	4	4	45	31	....	4	696
Totals	837	146	109	16	239	68	53	14	1,482

Information Reports

Six hundred ten Information Reports on as many separate mining operations were filed in the Bureau of Mines office by the inspectors in 1960. These reports are kept as a permanent public record on all mining properties in the State, and they give such information as the name of the operator, name of listed owner, a description of the underground workings, size of the vein, geological formation, type of timbering, surface installations, and other pertinent information concerning the operation.

INFORMATION REPORTS

Made By

1960	District 1 Blake	District 2 Theobald	District 3 Doyle & Keating	District 4 Ray & Pakka	Total
January	1	0	1	33	35
February	0	0	1	49	50
March	4	0	6	20	30
April	1	0	0	11	12
May	2	0	3	25	30
June	10	0	8	37	55
July	2	0	12	41	55
August	5	28	1	51	85
September	23	19	1	35	78
October	1	0	9	40	50
November	0	0	2	45	47
December	27	10	1	45	83
Totals	76	57	45	432	610

	Mines	Mills Plants Smelters	Pits & Quarries	Placers & Bogs	Oil & Gas Wells, Plants	Projects			Total
						Road	Tunnel	Dam	
District 1	36	6	21	10	3	....	....	....	76
District 2	34	9	12	1	....	....	1	....	57
District 3	19	7	1	2	10	3	1	2	45
District 4	395	17	5	2	6	4	....	3	432
Totals	484	39	39	15	19	7	2	5	610

Mineral Operations by County in Colorado

ADAMS COUNTY

Name of Property	Location	Operators Name and Address	Product	Kind of Property
Englewood	Adams County	Cooley Gravel Co., 6101 Lowell Blvd., Denver 11	Sand, Gravel, Gold	Plant
Inland	Derby	Boise Cascade Sand & Gravel Co., 7620 Madison St., Derby	Sand, Gravel, Gold	Plant
Plant Nos. 8, 10 & R	Denver	Brannan Sand & Gravel Co., 4800 Brighton Blvd., Denver 16	Sand, Gravel, Gold	Plant
Portable No. 209 at Pit No. 1	Denver	Brannan Sand & Gravel Co., 4800 Brighton Blvd., Denver 16	Sand, Gravel	Plant
Portable No. 219 at Pit No. 7	Denver	Brannan Sand & Gravel Co., 4800 Brighton Blvd., Denver 16	Sand, Gravel	Plant

ARAPAHOE COUNTY

Littleton Plant	Littleton	Cooley Gravel Co., 6101 Lowell Blvd., Denver 11	Sand, Gravel	Plant
North Plant	Arapahoe County	Cooley Gravel Co., 6101 Lowell Blvd., Denver 11	Sand, Gravel, Gold, Silver	Plant
Portable No. 3	Arapahoe County	Brannan Sand & Gravel Co., 4800 Brighton Blvd., Denver 16	Sand, Gravel	Plant

BOULDER COUNTY

Beaver Lake	Beaver Dam Lake	Beaver Lake Peat Co., 2902 6th St., Boulder	Peat	Peat Bog
Blue Bird	Grand Island	Ruehlman Mining & Land Co., 1941 Tyler Road, Boulder	Silver, Gold, Lead, Copper	Mine
Blue Stone Lode	Grand Island	R. E. Clarida & W. L. Stephenson, 3120 W. Arizona, Denver 19	Silver, Lead, Copper	Mine
Brodies St. Vrain	Lyons	Sterling Stone Quarries, Box 124, Lyons	Stone	Quarry
Burlington	Jamestown	Allied Chemical Corp., General Chemical Division, Box 228, Boulder	Fluorspar	Mine
Caribou	Caribou	Colorado Fertilizer Co., 3100 Walnut, Boulder	Peat	Peat Bog
Carrol Gore	Beach Hill	Loukenen Bros. Stone Co., Box 865, Lyons	Stone	Quarry
Cash	Gold Hill	Utex Exploration Co., Salina Star Route, Boulder	Gold	Mine
Comstock	Caribou	Pandora Metals, Inc., 1555 Dayton St., Aurora	Silver	Mine
Emmett	Jamestown	Williamson Mining Co., Box 431, Boulder	Fluorspar	Mine
Fair Day	Jamestown	La Salle Mining Co., Box 217, Grand Junction	Uranium	Mine
Ford	Nederland	E. J. & R. M. Ford, 2137 Pine St., Boulder	**Gold, Tungsten**	Mine

BOULDER COUNTY—Continued

Name of Property	Location	Operators Name and Address	Product	Kind of Property
Gladstone	Jamestown	Elliot Goldstein, 310 So. 40th St., Boulder	Fluorspar	Mine
Golden Age	Castle Gulch	Smuggler View, 1240 First Nat'l Bank Bldg., Omaha 2, Nebraska	Gold	Mine
Harms Peat Bog	Ward	W. F. Harms, Ward	Peat	Peat Bog
Loukenen Bros. Quarry	Beach Hill	Loukenen Bros. Stone Co., Box 865, Lyons	Stone	Quarry
McCall	Lyons	John Fitts, Box 686, Lyons	Stone	Quarry
McConnel	Lyons	Jacobson & Lyons Stone Co., Lyons	Stone	Quarry
Marion	Sugar Loaf Road	Earl G. Sweeney, 1061 Grant St., Boulder	Thorium	Mill
Noland	Lyons	Sterling Contracting Co., Box 759, Ft. Collins	Stone	Quarry
Pit Nos. 1 & 2	Eldorado Springs	Eldorado Clay Co., Rte. 1, Box 759, Golden	Clay	Mine
Rex	Summerville	Utex Exploration Co., Salina Star Route, Boulder	Gold, Silver	Mine
Sisk	Hall Gulch	Enibeta Corp., c/o Kenneth M. Droney, 4575 S. Lincoln St., Englewood	Uranium	Mine
Spicer	Rocky Flats	Colorado Brick Co., Box 727, Longmont	Clay	Mine
Tungsten	Grand Island	Tungsten Mining Co., 420 Pine St., Boulder	Tungsten	Mine
Valmont	Valmont	Allied Chemical Corp., General Chemical Division, Box 228, Boulder	Fluorspar	Plant
Victoria	Summerville	Utex Exploration Co., Salina Star Route, Boulder	Gold, Silver	Mine
Victory	Jamestown	Elliot Goldstein, 310 So. 40th St., Boulder	Uranium	Mine

CHAFFEE COUNTY

Name of Property	Location	Operators Name and Address	Product	Kind of Property
Colorado Granite Grit Mill	Salida	Colorado Granite Grits, Inc., Box 426, Salida	Granite	Plant
Crystal Placer	Ute Trail	Salida Granite Co., Salida	Granite	Quarry
Gold Eagle	Salida	Anschutz Drilling Co., 1411 Mile High Center, Denver	Gold, Silver, Lead, Copper, Zinc	Mine
Homestake	Ute Trail	M. & S. Inc., Box 691, Salida	Feldspar	Quarry
Monarch Lime Quarry & Plant	Monarch Pass	Colorado Fuel & Iron Corp., Box 316, Pueblo	Limestone	Quarry & Plant
Rock King	Ute Trail	Harvey Moyer, Box 671, Salida	Beryl, Mica, Feldspar	Quarry
Shannon Last Chance	Chalk Creek	Colorado Granite Grits, Inc., Box 426, Salida	Granite	Quarry
Sitting Bull	Chalk Creek	Fred M. Wadman, D.M.F. Co. Inc., 833 E. Platte Avenue, Colorado Springs	Lead, Silver	Mine
Western Feldspar Mill	Salida	Western Feldspar Milling Co., Box 671, Salida	Feldspar	Mill

CLEAR CREEK COUNTY

Alma Lincoln	Spanish Bar	Alma Lincoln Mining Co., Idaho Springs	Tourist	Mine
Argo Tunnel	Idaho Springs	Fall River Exploration & Mining Co., Idaho Springs	Base Metals	Mine
Ashland	Virginia Canyon	Larson, Young & Kingery, Box 716, Idaho Springs	Gold, Silver, Lead	Mine
Bald Eagle	Virginia Canyon	Bald Eagle Mining Co., Box 554, Idaho Springs	Gold, Lead, Copper, Zinc	Mine
Booth & Smith	Georgetown	Booth & Smith Sand & Gravel Co., Georgetown	Sand, Gravel	Plant
Burleigh Tunnel	Silver Plume	Silver Plume Mining Co., Georgetown	Silver, Lead, Zinc	Mine
Centennial	Virginia Canyon	Anthony V. Madonna, 1899 Allison, Lakewood	Gold	Mine
Central or Big Five	Idaho Springs	Clear Creek Mining Co., 1727 Boulder St., Denver	Gold, Silver, Lead, Copper	Mine
Diamond	Silver Plume	Silver Plume Mining Co., Georgetown	Silver, Lead, Zinc	Mine
Dixie	Ute Creek	Vicon Inc., Exchange National Bank Bldg., Colorado Springs	Gold, Silver	Mine
Drummond	Lawson	Drummond Mines, c/o J. B. Traynor, 512 Skyline Drive, Ft. Collins	Gold, Silver, Lead, Zinc, Copper	Mine
Franklin	Gilson Gulch	Franklin Silver Age Mining Co., c/o A. E. Burns, Wilson, Kansas	Silver, Lead, Copper	Mine
Freighter's Friend	Gilson Gulch	Freighter's Friend Mines, Box 356, Idaho Springs	Gold, Silver, Lead	Mine
Front Range Mill	Dumont	Front Range Mines, Inc., Box 704, Idaho Springs	Gold, Silver, Lead, Zinc, Copper	Mine
Grover	Beaver Brook Canyon	Reilly, Linquist & Grover, Evergreen	Beryl	Mine
Hall Tunnel	Georgetown	Harvey L. Tedrow, Olin Hotel, Denver 2 Cascade Mining Corp., Idaho Springs	Gold, Silver, Lead, Zinc	Mine
Humboldt Tunnel No. 3	Ute Creek	Richard E. Mackey, 15 So. Yukon St., Lakewood	Gold	Mine
King Cyrus Nos. 1 & 2	Spanish Bar	Lyle B. McNulty, 7505 Clay St., Westminster	Tourist	Mine
Lone Star No. 6	Clear Creek	Lone Star Mining Co., Box 6, Idaho Springs	Uranium	Mine
Lucania	Virginia Canyon	Fall River Exploration & Mining Co., Idaho Springs	Base Metals	Mine
Mackey	West Trail Creek	R. E. Mackey, 15 So. Yukon, Lakewood	Base Metals	Mill
Marshall Tunnel	Georgetown	Harvey L. Tedrow, Olin Hotel, Denver 2	Gold, Silver, Lead, Zinc	Mine
Mill Creek-Eagle	Dumont	Eichinger, Morse & Roberts, Box 636, Idaho Springs	Base Metals	Mine
Monarch	Lawson	Charles Coleman, 1931 Lincoln, West Chicago 14	Gold, Silver	Mine

CLEAR CREEK COUNTY—Continued

Name of Property	Location	Operators Name and Address	Product	Kind of Property
Princess	Lawson	Frank J. Moskal, 4216 West 25th Place, Chicago 23, Illinois	Gold, Silver, Lead	Mine
Roote Ranch	Gilson Gulch	Lee Morgan & Associates, Box 873, Idaho Springs	Uranium	Mine
Rusty Shovel, Black Squirrel	Trail Creek	Ambrahamson & Anderson, Lawson	Gold	Mine
Silver Spoon	Floyd Hill Station	Fred Garula, 1763 Williams St., Denver 18	Gold, Silver	Mine
Whitewater	Idaho Springs	Whitewater Sand & Gravel Co., Box 1751, Grand Junction	Sand, Gravel	Plant

COSTILLA COUNTY

Name of Property	Location	Operators Name and Address	Product	Kind of Property
Scoria	Mesita	Colorado Aggregates, Inc., Mesita	Volcanic Scoria	Quarry

CUSTER COUNTY

Name of Property	Location	Operators Name and Address	Product	Kind of Property
Buckeye-Holt	Ophir Creek	Eisenhour & Decker, Wetmore	Gold	Mine
Lodge Pole No. 1	Ophir Creek	Charles & Lyman Akin, Wetmore	Gold	Mine
Tomboy	Ophir	Charles & Lyman Akin, Wetmore	Gold	Mine
Virginia & Blue Lode	Hardscrabble	Joe and Charles Tomsick, Westcliffe	Silver	Mine

DELTA COUNTY

Name of Property	Location	Operators Name and Address	Product	Kind of Property
Smith Ford Dam	Crawford	Bud King Construction Co., Missoula, Montana		Dam

DENVER COUNTY

Name of Property	Location	Operators Name and Address	Product	Kind of Property
Denver Works	Denver	Allied Chemical Corp., General Chemical Division, Box 4040 So. Denver Station, Denver	Sulphuric Acid	Plant
Globe Plant	Globeville	American Smelting & Refining Co., 495 East 51st Avenue, Denver 16	Cadmium	Smelter

DOLORES COUNTY

Name of Property	Location	Operators Name and Address	Product	Kind of Property
Barlow Claims Nos. 1, 2, 3, 4, 5, 6	Barlow Creek	Vanadium Corp. of America, Durango	Uranium, Vanadium	Mine
Bushwacker	Barlow Creek	Vanadium Corp. of America, Durango	Uranium, Vanadium	Mine
Fritz Erickson Mining Co.	Barlow Creek	Fritz Erickson Mining Co., Dove Creek		Drilling, Exploration
Jack Wech	Silver Creek	Jack Wech, Cortez		Drilling
Mountain Springs	Rico	Rico Argentine Mining Co., Rico	Iron, Silver, Lead, Zinc	Mine
Ramco Acid Plant	Rico	Rico Argentine Mining Co., Rico	Sulphuric Acid	Plant
Rico Mill	Rico	Rico Argentine Mining Co., Rico	Iron, Lead, Zinc	Mill
Rosebud Group	Silver Creek	Brown & Johnson, Box 102, Dolores	Gold, Silver, Copper	Mine
St. Louis	Rico	Jones & Hannigan, Rico	Gold	Mine
St. Louis Tunnel	Rico	Rico Argentine Mining Co., Rico	Lead, Iron, Zinc, Pyrites	Mine

DOUGLAS COUNTY

Hogback Nos. 2 & 3	Waterton	Robinson Brick & Tile Co., 500 So. Santa Fe, Denver 23	Clay	Mine
Ringenberg	Littleton	Denver Brick & Pipe Co., Box 2329, Denver	Clay	Mine
Stevens Ranch	Castle Rock	Stroud Whisenhunt, Castle Rock	Clay	Mine
Stroh	Parker	Stroud Whisenhunt, Castle Rock	Clay	Mine

EAGLE COUNTY

Dotsero	Dotsero	Lava Products Co., Box 309, Glenwood Springs	Cinders	Quarry
Eagle Mill	Gilman	Empire Zinc Co., Gilman	Lead, Zinc	Mill
Eagle Mine	Gilman	Empire Zinc Co., Gilman	Gold, Silver, Lead, Zinc	Mine
Roaring Fork	Glenwood Springs	E. H. Bone, Route 1, Carbondale	Pumice	Quarry

EL PASO COUNTY

Castle	Colorado Springs	Castle Concrete Co., Box 2462, Colorado Springs	Limestone, Sand	Quarry
Lennox Breed	Colorado Springs	Colorado Materials Co., Box 183, Colorado Springs	Aggregate	Quarry
Rampart Range	Colorado Springs	Arthur Nichols, Lytle Star Route, Colorado Springs Paul Nixon, Pike View, Colorado Springs	Limestone	Quarry
Springs Silica	Colorado Springs	Wm. Eskeldson, 815 N. Pleasant Avenue, Colorado Springs	Silica Sand	Quarry

FREMONT COUNTY

Beryllium Oxide	Florence	Antero Beryllium Corp., 201 S. Robinson, Florence	Beryllium Oxide	Mill
Bootjack	Howard	Bootstrap, Inc., Salida	Gold, Copper	Mine
Burnito	Canon City	Ray Sturbaum, 225 Main St., Canon City	Ganister	Quarry
Calcite	Howard	Colorado Limestone Co., Howard	Limestone	Quarry
Canon Dolomite	Canon City	Colorado Fuel & Iron Corp., Pueblo	Dolomite	Quarry
Coaldale	Coaldale	Fibreboard Paper Products Co., Box 269, Florence	Gypsum	Quarry
Cotter Corp. Mine & Mill	Canon City	Cotter Corp., Box 751, Canon City	Uranium	Mine & Mill
Flint	Wilson Creek	Ralph Pierce, 108 Pennsylvania St., Canon City	Clay	Mine
Garden Park	Garden Park	John R. Beaton, 730 Main St., Canon City	Uranium	Mine
Horney Ganister	Temple Canyon	Ralph Pierce, 108 Pennsylvania St., Canon City	Silica	Quarry
I. & E.	Salt Canyon	Wm. R. Irvin, 345 So. Cottonwood, Canon City	Clay	Mine
Joan	Tallahassee	Seacol, Inc., 326 Main St., Canon City	Uranium	Mine
Last Chance	Tallahassee	Gunnison Mining Co., Box 539, Gunnison	Uranium	Mine
Lawson	Wetmore	Ralph Pierce, 108 Pennsylvania St., Canon City	Clay	Mine

FREMONT COUNTY—Continued

Name of Property	Location	Operators Name and Address	Product	Kind of Property
Mica Lode	Royal Gorge Park	Lockhart & Ellis, Canon City	Quartz	Quarry
Phantom Canyon	Beaver Creek Road	George Stroup, Elizabeth & Field Street, Canon City	Clay	Mine
Picnic Tree	Tallahassee	Smaller Mining Co., Box 768, Canon City	Uranium	Mine
Portland Plant & Quarry	Portland	Ideal Cement Co., Portland	Limestone	Plant & Quarry
Salt Canyon	Salt Canyon	Ralph Pierce, 108 Pennsylvania St., Canon City	Clay	Mine
Snooper-Dickson	Tallahassee	Melvin J. Wallace, 105 E. Stanley, Canon City	Uranium	Mine
Taylor Gulch	Taylor Gulch	Frank H. Norberg Co., 703 Guaranty Bank Bldg., Denver	Limestone	Quarry
Thorn No. 1	Tallahassee	Melvin J. Wallace, 105 E. Stanley, Canon City	Uranium	Mine
Williams	Tallahassee	Gunnison Mining Co., Box 539, Gunnison	Uranium	Mine
Williams Pit	Tallahassee	Logan Shelhamer, 849 S. 7th St., Canon City Gunnison Mining Co., Box 539, Gunnison	Uranium	Mine
Yellow King Nos. 1& 2	Canon City	George & Emma Lou Stultz, 514 Rudd Avenue, Canon City	Stone	Quarry

GARFIELD COUNTY

Name of Property	Location	Operators Name and Address	Product	Kind of Property
Glenwood Springs Lime Quarry	Glenwood Springs	Frank H. Norberg Co., 703 Guaranty Bank Bldg., Denver	Limestone	Quarry
Rifle Mill	Rifle	Union Carbide Nuclear Co., Rifle	Uranium, Vanadium	Mill
Rifle Mine	Rifle Creek	Union Carbide Nuclear Co., Rifle	Uranium, Vanadium	Mine

GILPIN COUNTY

Name of Property	Location	Operators Name and Address	Product	Kind of Property
Bob Tail Tunnel	Black Hawk	Gus Bakos & Robert Hollenback, Black Hawk	Tourist	Mine
Clark Wilson	Black Hawk	Max Goodwin, 3295 W. Alaska Pl., Denver 19	Gold	Placer
Colorado Peat Inc.	Black Hawk	Colorado Peat Inc., Route 2, Box 79, Golden	Peat	Peat Bog
Couch	Black Hawk	Stancil Couch, 1226 So. Everglade, Santa Anna, California	Gold, Tourist	Placer
Fanny	Black Hawk	Cliff Esterday, La Moille, Illinois	Gold, Silver	Mine
Fools Luck	Missouri Gulch	Earl & Allen Smith, Evergreen	Gold	Placer
Glory Hole	Central City	Glory Hole, Inc., Central City	Base Metals	Mill
Gold Nugget	Bay State	Wm. G. Spitts, 329 So. Pearl St., Denver	Gold, Tourist	Placer
Gold Rock, Rotechield and Pocahontas	Silver Lake	Paul J. Janes, 1010 Grand Ave., So. San Francisco, California	Gold	Mine
Golden Gilpin	Black Hawk	Roberts & Morse, Route 1, Evergreen	Base Metals	Mine

Grizzley	Vermillion	Crow & Mann, Rollinsville	Quartz	Quarry
Hayes & Wheeler	Central City	Hayes & Wheeler Syndicate, 4755 Newton St., Denver 21	Gold, Silver, Lead, Copper, Zinc	Mine
Huddleson (Toll Gate)	Black Hawk	Mike McNulty, Black Hawk	Tourist	Mine
Indian Girl	Lake Gulch	Smerdel, Thompson & Klarich, 1263 Marion St., Denver 18	Gold	Mine
La Crosse	Nevadaville	Ruth Mining & Drilling Co., Inc., 8607 E. Colfax, Denver Glory Hole Inc., Central City	Gold, Silver, Lead, Zinc	Mine
Little Colonel	Black Hawk	Black Hawk Trading Post, Black Hawk	Tourist	Mine
Marjorie	Black Hawk	Arizona Morning Star Mines, Box 156, Idaho Springs	Base Metal	Mill
Morning Star	Gilson Gulch	Art Portinier, Idaho Springs	Gold	Mine
National Bank Lode (Lost Gold)	Central City	Faye Tyson, Central City	Tourist	Mine
Nellie Bell	Miners Gulch	Lee Morgan & Associates, Box 873, Idaho Springs	Uranium	Mine
Philadelphia	Freeman Gulch	Chas. A. Slusher, Rte. 2, Box 413, Arvada	Gold, Silver, Lead	Mine
Rudolph Ranch	Black Hawk	Gus Rudolph, Black Hawk	Peat	Peat Bog
Secret Mine	Central City	R. H. Owens, 600 W. 10th, Amarillo, Texas	Gold	Mine
Snooks Tunnel	Perigo	Bee Vee Mines, Box 135, Rollinsville	Gold	Mine
Vanderbilt Lode (Diamond Lil)	Central City	Central Gold Mine & Mining Museum, Box 161, Central City	Gold, Silver, Copper, Tourist	Mine
Velvet Valley Rainbow	Hawk Eye	Lokes & Carnival, 1463 King St., Denver 4	Gold	Mine
We-Got-Em	Silver Lake	Garrick & Allison, Box 104, Mountain City, Nevada	Gold, Silver, Copper	Mine
White House	Mosquito Gulch	White House Mining Co., 7820 Niagara, Derby	Gold	Mine
Wilma	Apex	Nye Mathews, Inc., Black Hawk	Molybdenum	Mine
Zacher	Black Hawk	Ralph Zacher, Black Hawk	Gold	Placer

GRAND COUNTY

Moffat Tunnel Shaft	West Portal	Board of Water Commissioners, 144 W. Colfax Ave., Denver		Water Tunnel

GUNNISON COUNTY

Atlas	Crested Butte	Silver Crest Mining & Milling Co., Box 351, Crested Butte	Gold, Silver, Lead	Mill
Baxter & Skyline	Washington Gulch	Silver Crest Mining & Milling Co., Box 351, Crested Butte	Gold, Silver	Mine
Bell View	East River	Joe Powell, Box 563, Crested Butte	Gold, Silver, Lead, Zinc, Copper	Mine
Big Red	White Pine	John Carey, Salida Cotter Corp., Box 751, Canon City	Uranium	Mine
Endner Mine (Old Climax)	Cement Creek	Donald A. Hall, Box 495, Gunnison	Silver, Lead	Mine

GUNNISON COUNTY—Continued

Name of Property	Location	Operators Name and Address	Product	Kind of Property
Forest Queen	Cole Creek	John H. Hahn, Crested Butte	Gold, Silver, Lead, Zinc	Mine
Gold Links	Gold Creek	M. J. Kraft, 630 So. Hawthorne Ave., Boulder	Gold, Silver, Lead, Copper, Zinc	Mine
Gray Jeep Climax	Iola	Lakewood Mining Co., Box 495, Gunnison	Uranium, Thorium	Mine
Gunnison Uranium Mill	Gunnison	Gunnison Mining Co., Box 539, Gunnison	Uranium	Mill
Hot Rock	Tincup	Hugh Corrigan, Tincup	Silver, Lead	Mine
Keystone	Crested Butte	American Smelting & Refining Co., Crested Butte	Base Metals	Mine
Marble	Marble	Colotex Stone Co., Box 401, Glenwood Springs	Marble	Quarry
Micawber	Elk Basin	Standard Metals Co., 264 S. 4th East, Moab, Utah	Silver, Gold, Lead, Copper, Zinc	Mine
Micawber Mill	Elk Basin	Standard Metals Co., 264 S. 4th East, Moab, Utah	Lead, Zinc, Copper	Mill
Mountain Fern	Eyre Creek	Ben Flick, Bill Wright, Clair Chase, Ohio City, Colorado	Lead, Silver	Mine
Paonia Dam	Muddy Creek	Bud King Const. Co., Missoula, Montana		Dam
Silver Chief	Scoffield Park	Silver Chief Group, Box 515, Paonia	Base Metals	Mine
Silver Spruce	Rustlers Gulch	Joe Powell, Box 563, Crested Butte	Gold, Silver, Lead, Copper	Mine
Stearns Roger Tunnel	Powderhorn	Stearns Roger Mfg. Co., 660 Bannock, Denver	Prospect	Tunnel
X-10-U-8	Tincup	John Lambertson, Box 567, Gunnison	Silver, Lead, Zinc	Mine

HINSDALE COUNTY

Name of Property	Location	Operators Name and Address	Product	Kind of Property
Blue Ribbon	Hanson Creek	Reither, Waffensmith & Stake, 6905 W. Colfax Ave., Denver	Silver, Copper	Mine
Frank Hough	Hanson Creek	Golden Cycle Corp., Box 86, Colorado Springs	Silver, Copper	Mine
Pelican	Hanson Creek	Col-Tex Minerals Co., Inc., Lake City	Gold, Silver, Lead, Zinc	Mine
Pelican Mill	Hanson Creek	Col-Tex Minerals Co., Inc., Lake City	Gold, Silver, Lead, Zinc, Copper	Mill

JEFFERSON COUNTY

Name of Property	Location	Operators Name and Address	Product	Kind of Property
Aggregates, Inc.	Golden	Aggregates, Inc., 2120 So. Ash St., Denver 22	Aggregate	Plant
Ascension	Golden	Yellow Queen Uranium Co., 2027 E. Virginia Ave., Denver 9	Uranium	Mine
Beryl Ores	Arvada	Beryl Ores Co., Box 105, Rte. 1, Arvada	Beryl, Mica	Plant
Black Silica	Golden	Denver Fire Clay Co., 3303 Blake St., Denver	Clay	Mine
Caldwell	Plainview	Denver Brick & Pipe Co., 4501 Fox St., Denver	Clay	Mine

Cervi Lease	Golden	Arthur A. Cervi, 979 Miller St., Lakewood	Uranium	Mine
Church	Rocky Flats	Wesley D. Conda, Box 110, Rte. 1, Boulder	Clay	Mine
Foot Hills	Idledale	Cotter Corp., Box 751, Canon City	Uranium	Mine
Green Mountain	Golden	George W. Parfet Estate, Inc., Box 226, Golden	Clay	Mine
Happy Easter	Tincup	Thomas A. Easter, Box 201, Idaho Springs	Tourist	Mine
Harvey	Rocky Flats	John L. Harvey, 2970 Zenobia St., Denver 12	Clay	Mine
Kilgroe & Atchison	Jefferson County	Kilgroe & Atchison Const. & Paving Co., Box 7773, Lakewood	Gravel	Plant
Lakewood Pit	Golden	Lakewood Brick & Tile Co., 1325 Jay St., Lakewood	Clay	Mine
Lariat	Waterton	Robinson Brick & Tile Co., 500 So. Santa Fe, Denver	Clay	Mine
Leyden	Golden	George Lindsey, 1930 Forest St., Denver	Clay	Mine
Lindsey Buff Clay	Golden	Lakewood Brick & Tile Co., 1325 Jay St., Lakewood	Clay	Mine
Lindsey Red Clay	Golden	Lakewood Brick & Tile Co., 1325 Jay St., Lakewood	Clay	Mine
Little Brother	Golden	H. & G. Mining Co., 6901 Lee, Arvada	Uranium	Mine
Mena Shaft	Ralston Creek	Joseph W. Walsh, 4925 Montview Blvd., Denver 7	Uranium	Mine
Morrison West Side No. 1	Morrison	Morrison Stone Co., Ltd., Rte. 3, Box 367, Golden	Stone	Quarry
Motes	East Tincup	Robert J. Miller, 611 1st St., Golden	Tourist	Mine
Mt. Carbon	Morrison	Duane Bruno, 929 E. Ellsworth Ave., Denver	Shale	Mine
Nare	Golden	L. D. Ohman, 800 Bonnie Brae, Denver 9	Uranium	Mine
North Chieftain	Denver	Robinson Brick & Tile Co., 500 So. Santa Fe, Denver	Clay	Mine
North Golden	Golden	Denver Fire Clay Co., 3303 Blake St., Denver	Clay	Mine
Plant at Pit No. 11	Jefferson County	Brannan Sand & Gravel Co., 4800 Brighton Blvd., Denver	Sand, Gravel	Plant
Quarries, Inc.	Golden	Quarries, Inc., 5075 Cody St., Arvada	Aggregate	Quarry
Quatman	Idledale	Cotter Corp., Box 751, Canon City	Uranium	Mine
Ramstetter	Golden	Garney Bennetts, Rt. 1, Box 759, Golden	Clay	Mine
Red Clay	Plainview	Colorado Brick Co., Longmont	Clay	Mine
Rig No. 1	Golden	Denver Brick & Pipe Co., 4501 Fox St., Denver	Drilling	Mine
Rio Grande	Jefferson County	Rio Grande Gravel Co., 123 Santa Fe, Denver	Sand, Gravel	Plant
Rockwell	Golden	Geo. W. Parfet, Box 226, Golden	Clay	Mine
Rocky Flats	Rocky Flats	Great Western Aggregates, Inc., 806 Boston Bldg., Denver	Aggregate	Quarry
Rubey	Golden	Rubey Clay Co., Box 226, Golden	Clay	Mine
Saunders Lease	Idledale	Cotter Corp., Box 751, Canon City	Uranium	Mine
Schwartzwalder	Ralston Creek	Denver Golden Corp., 1820 1st Nat'l Bank Bldg., Denver	Uranium	Mine

JEFFERSON COUNTY—Continued

Name of Property	Location	Operators Name and Address	Product	Kind of Property
Seven Devils	Waterton	Continental Materials Corp., Box 1550, Grand Junction	Uranium	Mine
South Chieftain	Golden	Robinson Brick & Tile Co., 500 So. Santa Fe, Denver	Clay	Mine
State	Rocky Flats	Colorado Brick Co., Longmont	Clay	Mine
Strainland No. 2	Plainview	Denver Brick & Pipe Co., 4501 Fox St., Denver	Clay	Mine
Table Mountain	N. Table Mountain	Aggregates, Inc., 2120 So. Ash St., Denver Table Mountain, Inc., 2680 Youngfield, Denver 15	Sand, Gravel	Plant
Tan Plastics	Golden	G. C. Bennetts, Box 759, Rte. 1, Golden	Clay	Mine
Two Brothers	Golden	Denver Fire Clay Co., 3303 Blake St., Denver	Clay	Mine

LAKE COUNTY

Name of Property	Location	Operators Name and Address	Product	Kind of Property
Arkansas Valley Smelter	Leadville	American Smelting & Refining Co., 495 E. 51st., Denver 16	Lead, Zinc	Smelter
Baldtown	Leadville	Harry Nylene, 116 Hunter Road, Leadville	Gold	Placer
Ceresco Ridge	Climax	Boyles Bros. Drilling Co., 1321 So. Main St., Salt Lake City, Utah	Molybdenum	Drilling
Climax Mill	Climax	American Metals Climax, Inc., Climax	Molybdenum	Mill
Climax Mine	Climax	American Metals Climax, Inc., Climax	Molybdenum	Mine
Crushing & Screening Plant	Kokomo	C. Ryan & Son, 6001 McIntyre, Golden	Molybdenum, Sand, Gravel	Plant
Gordon	Twin Lakes	Denzel A. Hatch, Twin Lakes	Gold, Lead, Silver	Mine
Mt. Elbert Peat Moss	Hayden Ranch	Clarence Reiff & Dave Rice Kremmlin	Peat Moss	Peat Bog
Rattlin Jack	Johnny Hill	Rattling Jack Parnership, 512½ E. 7th St., Leadville	Gold, Silver, Lead, Zinc	Mine
Yak Tunnel	Leadville	American Smelting & Refining Co., 495 E. 51st Avenue, Denver 16	Gold, Silver, Lead	Mine

LA PLATA COUNTY

Name of Property	Location	Operators Name and Address	Product	Kind of Property
Bessie G	Heffernan Gulch	La Plata Gold Corp., 708 Majestic Bldg., Denver	Gold, Silver	Mine
Comstock	La Plata Canyon	John Montonati, 683 4th Ave., Durango	Gold, Silver	Mine
Eleanora	La Plata Canyon	Crater Lake Mining Co., Strater Hotel, Durango	Gold, Silver, Lead, Zinc, Copper	Mine
Marcy-Shenandoah	Beaver Mesa	Marcy-Shenandoah, Inc., Durango	Base Metals	Mine
Mars	La Plata Canyon	Ralph Jason, Box 96, Compton, California	Lead, Copper	Mine
Neglected	Gains Gulch	Gus Winhouse, 711 4th Avenue, Durango	Gold, Silver, Lead	Mine

Muldoon	La Plata Mountains	Herman Todeski, Durango	Silver	Mine
Sarah G	Hermosa	Charles C. Goulding, Box 1542, Durango	Gold.	Mine
Silver State Smelting & Refining Co.	Durango	Lindsay Becker, 2200 Crest View Drive, Durango	Gold, Lead, Zinc, Copper	Smelter
V. C. A. Mill	Durango	Vanadium Corp. of America, Durango	Uranium, Vanadium	Mill
Wildcat	La Plata-Spencer Creek	Ralph Jason, Box 96, Compton, California	Silver	Mine

LARIMER COUNTY

Berthoud Stone Quarries	Carter Lake	Colorado Stone Co., 1635 N. Main St., Longmont	Stone	Quarry
Boettcher Plant	La Porte	Ideal Cement Co., Box 579, Ft. Collins	Limestone	Plant
Boettcher Quarry	La Porte	Ideal Cement Co., Box 579, Ft. Collins	Limestone	Quarry
Big Boulder	Crystal Mountain	W. R. & Helen S. Allphin, Box 292, Jamestown	Beryl	Mine
Chance	Masonville	Weaver Stone Quarries, 759 So. York St., Denver	Stone	Quarry
Colorado Stone	Beach Hill	Colorado Stone Co., 1635 N .Main St., Longmont	Stone	Quarry
Corral Pole Nos. 1, 2	Crystal Mountain	Arthur Johnson, 625 Mathews, Ft. Collins	Beryl, Mica	Mine
Fudge	Beach Hill	Fudge Stone Cutting Co., Box 275, Lyons	Stone	Quarry
Giant Crystal	Drake	Pegmatite Mining & Beryllium Co., Box 694, Windsor	Beryl, Mica	Mine
Goodwin	Payne Ranch	Ernest W. Munroe, Rte. 2, Box 273, Ft. Collins	Gypsum	Quarry
Hide Above Lode	Storm Mountain	National Beryl & Mining Corp., Box 1348, Estes Park	Beryl, Mica	Mine
Jacobson & Lyons	Beach Hill	Jacobson & Lyons Stone Co., Box C, Lyons	Stone	Quarry
Jolex	Columbine	Jolex Mica Co., Box 575, Ft. Collins	Mica	Mill
Kistler	Carter Lake	Jacobson Lyons Stone Co., Inc., Box C, Lyons	Stone	Quarry
Langston	Columbine	Jolex Mica Co., Box 575, Ft. Collins	Beryl, Mica	Mine
Lavender	Masonville	Buckhorn Quarries, Loveland	Stone	Quarry
Lodge Pole	Crystal Mountain	Young & Johnson, 395 Grape St., Denver 20	Beryl, Mica	Mine
Loveland	Loveland	U. S. Gypsum Co., Estes Park Rte., Loveland	Gypsum	Quarry
Masonville	Masonville	Gus Feher, Estes Park Rte., Loveland	Stone	Quarry
Mincon Berthoud Plant	Berthoud	Mineral Concentrates & Chemical Co., 1430 First Nat'l Bank Bldg., Denver 2	Beryllium Oxide	Plant
Mincon Loveland Plant	Loveland	Mineral Concentrates & Chemical Co., 1430 First Nat'l Bank Bldg., Denver 2	Beryllium Oxide	Plant

LARIMER COUNTY—Continued

Name of Property	Location	Operators Name and Address	Product	Kind of Property
Mt. Olympus No. 2	Poudre Canyon	Lucky Oscar Mica Co., 1636 Garfield, Loveland	Beryl, Mica	Mine
Munroe	Payne Ranch	Ernest W. Munroe, Rte. 2, Box 273, Ft. Collins	Gypsum	Plant
Ohline Quarry	Beach Hill	Arthur Ohline, Lyons	Stone	Quarry
Poudre Canyon	Loveland	Lucky Oscar Mica Co., 1636 Garfield, Loveland	Mica	Mill
Rex	Owl Canyon	Frank H. Norberg Co., 703 Guaranty Bank Bldg., Denver	Limestone	Quarry
Silica Beryl	Crystal Mountain	Young & Johnson, 395 Grape St., Denver 20	Beryl, Mica	Mine
Somac Nos. 1, 2	Carter Lake	Somac Stone Quarries, 1729 12th Ave., Greeley	Stone	Quarry
Spears	Beach Hill	B. H. Spears, Box 874, Lyons	Stone	Quarry
Sprague	Carter Lake	Berthoud Pink Stone Co., Rte. 2, Box 99A, Berthoud	Stone	Quarry
Sterling Sand & Gravel	North Taft Hill Road	Sterling Sand & Gravel Co., Box 759, Ft. Collins	Sand, Gravel	Plant
Thodave	Crystal Mountain	H. L. Mattox & Sons, 17195 W. 8th Pl., Golden	Beryl, Mica	Mine
Weaver	Masonville	Weaver Stone Quarries, 759 So. York St., Denver	Stone	Quarry
Whitewater	Loveland	Whitewater Sand & Gravel Co., Box 1751, Grand Junction	Gravel	Plant
Wilson	Beach Hill	Bill Wilson Stone Co., 932 Arapahoe St., Boulder	Stone	Quarry
Yo-Jo No. 15	Crystal Mountain	Young & Johnson, 395 Grape St., Denver	Beryl, Mica	Mine

LAS ANIMAS COUNTY

Name of Property	Location	Operators Name and Address	Product	Kind of Property
Santa Fe	Starkville	Scott Mining Co., Starkville	Clay	Mine

MESA COUNTY

Name of Property	Location	Operators Name and Address	Product	Kind of Property
Arrowhead No. 12	Calamity Mesa	Ira Adamson, 226-29 Road, Grand Junction	Uranium, Vanadium	Mine
Arrowhead No. 20	Calamity Mesa	Rex Sterry, Rte. 1, Grand Junction	Uranium, Vanadium	Mine
Black Mama No. 3	Tenderfoot Mesa	Robert London & Hugo Johnson, Box 217, Naturita	Uranium, Vanadium	Mine
Blue Ribbon No. 2	Calamity Mesa	Calvin Ficklin, Box 1861, Grand Junction Rex Sterry, Rte. 1, Grand Junction	Uranium, Vanadium	Mine
Century Tunnel	Beaver Mesa	Argo Mining Co., Box 1698, Grand Junction	Uranium, Vanadium	Mine
Cherokee Shaft	Beaver Mesa	Beaver Mesa Uranium Co., 1129 Colo. Ave., Grand Junction	Uranium, Vanadium	Mine
Climax Uranium Mill	Grand Junction	Climax Uranium Co., Box 1901, Grand Junction	Uranium, Vanadium	Mill
Crawford, James B.	Dolores River	James B. Crawford, Rox 521, Norwood		Drilling

Crow's Nest No. 2	Outlaw Mesa	Delmer Cason, 470 Dyke Road, Grand Junction	Uranium, Vanadium	Mine
Depression No. 5	Gateway	Eugene W. Bonner, Grand Junction	Uranium, Vanadium	Mine
Elizabeth Nos. 10, 17	Blue Mesa	George Liverman, 2236 Orchard Ave., Grand Junction	Uranium, Vanadium	Mine
Government No. 1	Outlaw Mesa	Climax Uranium Co., Box 1901, Grand Junction E. E. Lewis, 823 Winters Ave., Grand Junction	Uranium, Vanadium	Mine
Government No. 1-A	Outlaw Mesa	H. L. Arbogas, 234-31.3 Road, Grand Junction	Uranium, Vanadium	Mine
Government No. 3	Outlaw Mesa	Climax Uranium Co., Box 1901, Grand Junction	Uranium, Vanadium	Mine
Government No. 4	Outlaw Mesa	Floyd Smith, Box 236, Grand Junction	Uranium, Vanadium	Mine
Hubbard & Packrat	Beaver Mesa	Dean Nicholson, Box 1272, Grand Junction New Idria Mining Co., Box 311, Grand Junction Joe Pitts, 330 W. Mesa Ave., Grand Junction	Uranium, Vanadium	Mine
Junction Brick & Supply	Grand Junction	Junction Brick & Supply Co., 2400 N. 17th, Grand Junction	Brick, Tile	Mine
Karns Incline	Beaver Mesa	Ed Knizley, 274-27 Road, Grand Junction	Uranium, Vanadium	Mine
La Sal	Beaver Mesa	Flanders Mining Co., Box 861, Grand Junction CenPac Mining, Box 861, Grand Junction	Uranium, Vanadium	Mine
Liberty Bell	Tenderfoot Mesa	E. E. Lewis, 823 Winters Ave., Grand Junction	Uranium, Vanadium	Mine
Lippoth & Wein	Several Counties	Lippoth & Wein Drilling Co., Box 502, Grand Junction		Drilling
Loma Rock Quarry	Loma	Edward Green, Buena Vista	Stone	Quarry
Lumsden Nos. 2, 6	Beaver Mesa	Ralph Hickman, Rte. 1, Grand Junction	Uranium, Vanadium	Mine
Mineral Channel No. 3	Outlaw Mesa	Ralph Foster & Sons, 1217 Colorado Ave., Grand Junction H. L. Arbogast, 234-31.3 Road, Grand Junction	Uranium, Vanadium	Mine
Mesa Nos. 5, 8	Outlaw Mesa	Herbert Foster, 1217 Colorado Ave., Grand Junction	Uranium, Vanadium	Mine
Mitchell Drilling	Bull Canyon and Four Corners	John Mitchell & Son, 516 Lilac Lane, Grand Junction		Drilling
National Lead Co., Inc.	Grand Junction	National Lead Co., Inc., Box 1849, Grand Junction	A.E.C. Research Program	
New Verde	Calamity Mesa	Star Mining Co., Box 291, Grand Junction	Uranium, Vanadium	Mine
O'Connell Drilling	Four Corners	O'Connell Drilling Co., Box 2165, Casper, Wyo.		Drilling
O'Kan	Tenderfoot Mesa	Dale Dunkle, 2728 F Road, Grand Junction	Uranium, Vanadium	Mine
October Adit	Beaver Mesa	O. E. Jonson, Box 294, Dove Creek	Uranium, Vanadium	Mine
Outlaw No. 8	Outlaw Mesa	Harold Sargent, Box 1562, Grand Junction	Uranium, Vanadium	Mine

MESA COUNTY—Continued

Name of Property	Location	Operators Name and Address	Product	Kind of Property
Protector	Tenderfoot Mesa	Phil Bunker Mining Co., Box 227, Nucla	Uranium, Vanadium	Mine
Rajah No. 30	Beaver Mesa	Model Mining Co., Box 1105, Grand Junction	Uranium, Vanadium	Mine
Rajah Nos. 63 & 68	Beaver Mesa	Beaver Mesa Uranium Co., Box 567, Grand Junction	Uranium, Vanadium	Mine
Ronnie No. 1	Outlaw Mesa	Cleo Fears, Box 1901, Grand Junction	Uranium, Vanadium	Mine
Sprague & Henwood	Four Corners	Sprague & Henwood, 2472 Highway 6, Grand Junction		Core Drilling
Sunspot (Thundercloud)	Beaver Mesa	Ed Horn, Box 743, Rifle	Uranium, Vanadium	Mine
Thornton Tunnel	Beaver Mesa	Charles W. Woodard & Co., 2909 Highway 50, Grand Junction	Uranium, Vanadium	Mine
Trojan No. 20	Outlaw Mesa	Lark Washburn, Box 750, Uravan	Uranium, Vanadium	Mine
Whitewater Sand & Gravel	Grand Junction	Whitewater Sand & Gravel Co., So. 10th St., Grand Junction	Sand, Gravel	Plant

MINERAL COUNTY

Name of Property	Location	Operators Name and Address	Product	Kind of Property
Amethyst & Commodore	West Willow Creek	Emperius Mining Co., Creede	Silver, Lead, Zinc	Mine
Emperius Mill	Creede	Emperius Mining Co., Creede	Silver, Lead, Zinc	Mill
Jackpot	King Solomon	H. & B. Const. Co., Creede	Silver, Lead, Zinc	Mine
Monon	Creede	Monon Mining Co., Creede	Silver, Lead, Zinc	Mine
Phoenix	East Willow Creek	Outlet Mining Co., Box 11, Creede	Gold, Silver, Lead	Mine

MOFFAT COUNTY

Name of Property	Location	Operators Name and Address	Product	Kind of Property
Maybell Mill	Maybell	Trace Elements Corp., Maybell	Uranium	Mill
Maybell Mine	Maybell	Trace Elements Corp., Maybell	Uranium	Mine
Trace Elements Pits	Maybell	Trace Elements Corp., Maybell	Uranium	Mine

MONTEZUMA COUNTY

Name of Property	Location	Operators Name and Address	Product	Kind of Property
Blue Eagle	Cross Canyon	Elree Young, Sego Rte., Dove Creek	Uranium, Vanadium	Mine
Brownville	East Mancos River	Gene Crawford, 223 N. Ash St., Cortez	Gold, Silver	Mine
Discovery Level (Red Arrow)	East Mancos River	First Nat'l Oil & Minerals Co., Box 205, Mancos		
		Wesley Potts, Mancos	Gold, Silver	Mine
Gold Run Nos. 1, 2, 3, 4	Madden Peak	Warren Lyen, Box 63, Mancos	Gold, Silver	Mine
Hazel-Lu	Ross Mountain	John & Albert Lyen, 3025 E. 6th Ave., Durango	Gold	Mine
Ripple Placer & Baby Bear	Dolores Rim	Ripple & Baby Bear Mining Co., Box 75, Rico	Gold, Silver	Placer
Sexton Bros.	Highway 160	Sexton Bros. Drilling Co., Box 506, Cortez	Rotary Drilling	
Twin Canyon Group	Twin Canyon	Wesley Potts, Mancos	Gold	Mine

MONTROSE COUNTY

Adak (Wildhorse, Colorado)	Dolores Rim	Reed, Belisle & Reed, Box 325, Uravan	Uranium, Vanadium	Mine
All Stars	Spring Creek Mesa	Lark L. Washburn, Box 750, Uravan	Uranium, Vanadium	Mine
American Eagle	Little Gyp Valley	Lowell & Patrick Thompson, Box 34, Naturita	Uranium, Vanadium	Mine
Anna May No. 1	Monogram Bench	Cole & Bond, Box 56, Uravan	Uranium, Vanadium	Mine
Aztec & Black Tom	Monogram Mesa	C. N. Athey, Box 156, Naturita	Uranium, Vanadium	Mine
Baby Fawn	Bull Canyon	Githon Reed, Naturita	Uranium, Vanadium	Mine
Baby Ruth	Bull Canyon	S. V. Brown, Box 224, Naturita	Uranium, Vanadium	Mine
Betty Jean	Martin Mesa	Stanley Reed, Box 325, Uravan David Pace, Gateway	Uranium, Vanadium	Mine
Betty Jean No. 2	Martin Mesa	David Pace, Gateway	Uranium, Vanadium	Mine
Big Chief	Rock Creek	Woodrow Gripe, Naturita	Uranium, Vanadium	Mine
Big Dick	Dolores Rim	Blake, Powers & Stocklasa, Box 400, Uravan	Uranium, Vanadium	Mine
Big Mitt	Atkinson Mesa	Cole & Bond, Box 56, Uravan	Uranium, Vanadium	Mine
Bill Batey	Monogram Mesa	Peter Franks, Nucla	Uranium, Vanadium	Mine
Bitter Creek	Long Park	Ben Brito, Box 626, Delta Loren Jack Jewell, Box 271, Uravan	Uranium, Vanadium	Mine
Bitter Creek No. 300	Bitter Creek	Loren Jack Jewell, Box 271, Uravan	Uranium, Vanadium	Mine
Blackburn Extension	Monogram Mesa	Lowell Staats, Box 337, Nucla	Uranium, Vanadium	Mine
Black Diana	Long Park	Russell E. Mayfield, Box 596, Nucla	Uranium, Vanadium	Mine
Black Rock	Atkinson Mesa	Reed Brothers, Box 273, Naturita	Uranium, Vanadium	Mine
Bliss	Long Park	Lark Washburn, Box 750, Uravan	Uranium, Vanadium	Mine
Blue Bell	Long Park	Blake, Powers & Stocklasa, Box 91, Uravan	Uranium, Vanadium	Mine
Bobtail	Monogram Bench	Cole & Bond, Box 56, Uravan	Uranium, Vanadium	Mine
Bowen	Atkinson Mesa	Golden Cycle Corp., Box 86, Colorado Springs	Uranium, Vanadium	Mine
Boyles Bros.	Several Counties	Boyles Bros. Drilling Co., 1321 So. Main St., Salt Lake City, Utah		Drilling
Buckhorn	Carpenter Ridge	O. E. Smart, Box 296, Naturita	Uranium, Vanadium	Mine
Buck Shot	Club Mesa	Blake, Powers & Stocklasa, Box 91, Uravan	Uranium, Vanadium	Mine
Burro Point	Wedding Bell	Frank Fidel, 1801 N. 4th, Grand Junction	Uranium, Vanadium	Mine
Butterfly	Eagle Canyon	Homer Woods, Uravan	Uranium, Vanadium	Mine
Cannon No. 7	Martin Mesa	Cole & Bond, Box 56, Uravan	Uranium, Vanadium	Mine
Canopus & Sirius	Monogram Mesa	Joe Weaver, Box 393, Uravan	Uranium, Vanadium	Mine
Capella	Monogram Mesa	Union Carbide Nuclear Company, Uravan	Uranium, Vanadium	Mine
Cliff Dweller	Atkinson Mesa	Glen Gardner, Box 202, Naturita	Uranium, Vanadium	Mine
Club No. 2	Club Mesa	John W. Brinkley, Box 234, Uravan	Uranium, Vanadium	Mine
Club Group	Club Mesa	Lark Washburn, Box 750, Uravan	Uranium, Vanadium	Mine
Club Mine	Club Mesa	Lippoth & Wein Drilling Co., Box 502, Grand Junction	Uranium, Vanadium	Mine
Club Sandwich	Dolores Rim	Woodrow E. Gripe, Box 225, Naturita	Uranium, Vanadium	Mine
Coloradium	Long Park	Roy Franklin, Box 911, Uravan	Uranium, Vanadium	Mine
Commodore	Club Mesa	Lark Washburn, Box 750, Uravan	Uranium, Vanadium	Mine
Cripple Creek South	Middle Long Park	Raymond R. King, Box 353, Uravan	Uranium, Vanadium	Mine

MONTROSE COUNTY—Continued

Name of Property	Location	Operators Name and Address	Product	Kind of Property
Cripple Creek No. 2	Long Park	Albert Nickerson, 515 So. Junction Ave., Montrose	Uranium, Vanadium	Mine
Deer Shaft	Monogram Mesa	Stanley Kuykendall, Box 195, Naturita	Uranium, Vanadium	Mine
Diana	Bachelor Draw	Joe R. Nelson, Box 512, Nucla	Uranium, Vanadium	Mine
Doagey No. 2	Monogram Mesa	C. N. Athey, Box 156, Naturita	Uranium, Vanadium	Mine
Donald L	Long Park	Glen Shipley, Box 284, Uravan Homer Woods, Uravan	Uranium, Vanadium	Mine
Donna K	Middle Long Park	Art Thompson, Box 193, Nucla	Uranium, Vanadium	Mine
Dorothy Jean No. 1 & Uranus	Monogram Bench	Carl D. Tucker, Box 461, Grand Valley	Uranium, Vanadium	Mine
Duchess Nos. 2, 3	Martin Mesa	A. E. David, 1160 Belford Ave., Grand Junction	Uranium, Vanadium	Mine
Duggan Adit	East Paradox	Climax Uranium Co., Box 1901, Grand Junction	Uranium, Vanadium	Mine
Dusty	Long Park	Art Thompson, Box 501, Uravan	Uranium, Vanadium	Mine
Dusty No. 2	Long Park	Harvey Holt, Naturita	Uranium, Vanadium	Mine
Equinox	Dolores Rim	Reed, Belisle & Reed, Box 325 Naturita	Uranium, Vanadium	Mine
Eureka	Carpenter Ridge	Vanadium Corp. of America, Durango	Uranium, Vanadium	Mine
Eva	La Sal Creek	Wright & Rinderle, Grand Junction D. B. McQuade, Box O, Naturita	Uranium, Vanadium	Mine
Evening Star	Lion Creek	De Var Shumway & Dade, 215 Landsdown Drive, Grand Junction	Uranium, Vanadium	Mine
Eula Belle	Mesa Creek	Union Carbide Nuclear Co., Uravan	Uranium, Vanadium	Mine
Fairy Queen	Eagle Basin	Lark Washburn, Box 750, Uravan	Uranium, Vanadium	Mine
Fawn Springs No. 5	Upper Bull Canyon	Joe Cole, Box 274, Naturita	Uranium, Vanadium	Mine
Fawn Springs Nos. 4, 10	Upper Bull Canyon	Workman Bros., Box 296, Uravan	Uranium, Vanadium	Mine
Fawn Springs Nos. 7, 13	Upper Bull Canyon	Workman Bros., Box 296, Uravan	Uranium, Vanadium	Mine
Fawn Springs No. 15	Bull Canyon	Ed Horn, Box 743, Rifle	Uranium, Vanadium	Mine
Fawn Springs Nos. 9, 12, 21, 11, 18	Upper Bull Canyon	Clark & Harris, Box 728, Nucla	Uranium, Vanadium	Mine
Firecracker Nos. 1, 2, 3	Long Park	Andress Bros., Box 333, Norwood	Uranium, Vanadium	Mine
First National Bank	Long Park	Barnes Bros., Box 156, Nucla	Uranium, Vanadium	Mine
Florence Nellie	Long Park	Lark Washburn, Box 750, Uravan	Uranium, Vanadium	Mine
Fossil	Bull Canyon	Jerry Mayfield, Box 222, Naturita	Uranium, Vanadium	Mine
Fox	Dolores Rim	Delbert Burbridge, Box 187, Nucla	Uranium, Vanadium	Mine
Friday	Long Park	Russell Mayfield, Box 596, Nucla O'Bryant & Powell, Box 441, Uravan	Uranium, Vanadium	Mine
Gilbert	Bull Canyon	Ben Zimmerman, 2940½ F Road, Grand Junction	Uranium, Vanadium	Mine
Great Western	Long Park	Brewer & Herring, Box 104, Nucla Emmons & Herring, Box 161, Naturita	Uranium, Vanadium	Mine
Green Back	Monogram Bench	Cole & Bond, Box 56, Uravan	Uranium, Vanadium	Mine

Groundhog	Middle Long Park	Loyd Alexander, Box 311, Naturita	Uranium, Vanadium	Mine
Guadacanal	Middle Long Park	La Verne Ray, Box 256, Uravan	Uranium, Vanadium	Mine
Happy Thought	Monogram Bench	Cole & Bond, Box 56, Uravan	Uranium, Vanadium	Mine
Henry Clay	Middle Long Park	Roy Franklin, Box 911, Uravan	Uranium, Vanadium	Mine
Hidden Basin	Long Park	Vanadium Corp. of America, Durango Silver Lane Mining Co., Pueblo	Uranium, Vanadium	Mine
Honeymoon	Long Park	Lark Washburn, Box 750, Uravan	Uranium, Vanadium	Mine
Hummer	Monogram Mesa	Lowell Staats, Box 337, Nucla	Uranium, Vanadium	Mine
Joe	Dolores Rim	Douglas Cleghorn, Box 502, Uravan	Uranium, Vanadium	Mine
Joe Dandy	Monogram Mesa	Cole & Bond, Box 56, Uravan	Uranium, Vanadium	Mine
Joe Jr. & R.A.M.	Club Mesa	Lark Washburn, Box 750, Uravan	Uranium, Vanadium	Mine
Johnson & Youvan	Colorado Plateau	Johnson & Youvan, Naturita	Drilling	
Just Right	Club Mesa	Dan Kelly, Rte. 4, Grand Junction	Uranium, Vanadium	Mine
Lark Group	Bull Canyon	James Galyean, Box 474, Nucla	Uranium, Vanadium	Mine
La Salle	Club Mesa	La Salle Mining Co., Box 92, Uravan	Uranium, Vanadium	Mine
Little Alice	Wild Steer Canyon	Delbert Barker, Box 263, Nucla	Uranium, Vanadium	Mine
Little Basin	Spring Creek Mesa	J. W. Ricks, Box 207, Uravan	Uranium, Vanadium	Mine
Little Buckhorn	Carpenter Flats	K. A. O. Mining Co., 2679B½ Road, Grand Junction	Uranium, Vanadium	Mine
Little Dick	Dolores Rim	Delbert Burbridge, Box 263, Nucla	Uranium, Vanadium	Mine
Long Park No. 1	Long Park	Wm. R. Pierce, Box 338, Nucla	Uranium, Vanadium	Mine
Long Park No. 2	Long Park	Russell Mayfield, Box 222, Nucla	Uranium, Vanadium	Mine
Long Park Nos. 3, 4	Long Park	Marion Trone, Box 376, Uravan	Uranium, Vanadium	Mine
Long Park No. 6	Long Park	Calvin C. Sanders, Box 431, Nucla	Uranium, Vanadium	Mine
Long Park No. 9 & Fourth National Bank	Middle Long Park	Russell Mayfield, Box 222, Nucla	Uranium, Vanadium	Mine
Long Park No. 12	Long Park	Calvin C. Sanders, Box 431, Nucla	Uranium, Vanadium	Mine
Lower Oversite	Monogram Mesa	Lowell Staats, Box 337, Nucla	Uranium, Vanadium	Mine
Lucky Boy	Monogram Mesa	Peter Franks, Nucla	Uranium, Vanadium	Mine
Lucky Dog	Atkinson Mesa	Cole & Bond, Box 56, Uravan	Uranium, Vanadium	Mine
M. J. No. 1, Mineral Joe	Monogram Mesa	Climax Uranium Co., Box 1901, Grand Junction	Uranium, Vanadium	Mine
M. L.-23 No. 2, Mineral Lease	Long Park	J. Livingston, Box 293, Uravan Morrison & Davis, Box 195, Nucla	Uranium, Vanadium	Mine
MacPherson Drilling	Colorado Plateau	MacPherson Drilling Co., 325 N. Townsend, Montrose		Core Drilling
Maggie C	Middle Long Park	Carl Holder, Box 399, Dove Creek Cliff Ream & Homer Woods, Uravan	Uranium, Vanadium	Mine
Margie	Saucer Basin	Moores & Kelly, Rte. 4, Grand Junction	Uranium, Vanadium	Mine
Marjorie Ann	Lion Creek	De Var Shumway & John Dade, 215 Landsdown Dr., Grand Junction	Uranium, Vanadium	Mine
Mary Ann & Dorothy Jean No. 2	Monogram Bench	T. S. Wolverton, Box 284, Dove Creek	Uranium, Vanadium	Mine
Maude	La Sal Creek	Ernest Berry, Box 237, Naturita	Uranium, Vanadium	Mine

MONTROSE COUNTY—Continued

Name of Property	Location	Operators Name and Address	Product	Kind of Property
Media	Long Park	Luther Brickey, Naturita	Uranium, Vanadium	Mine
Merry Widow	Eagle Canyon	Paul Smith & Oran Thompson, Box 391, Nucla	Uranium, Vanadium	Mine
Mesa	Bull Canyon	Harvey Holt, Box 232, Norwood	Uranium, Vanadium	Mine
Mill No. 1 & J. M.	Club Mesa	Lark Washburn, Box 750, Uravan	Uranium, Vanadium	Mine
Mill No. 2 & Govt. Block 3-4	Club Mesa	Javernick & Borgenson, Box 408, Uravan	Uranium, Vanadium	Mine
Mineral Joe No. 2	Monogram Mesa	Fred Richards & Son, Box 384, Nucla Floyd Smith, Box 343, Naturita E. E. Lewis, Inc., Box 1481, Grand Junction	Uranium, Vanadium	Mine
Mineral Joe No. 11	East Paradox	Climax Uranium Co., Box 1901, Grand Junction	Uranium, Vanadium	Mine
Monogram	Monogram Bench	Cole & Bond, Box 56, Uravan	Uranium, Vanadium	Mine
Mucker	Long Park	Albert Nickerson, 515 So. Junction Ave., Montrose	Uranium, Vanadium	Mine
New Bernard & Carleton	Long Park	Lark Washburn, Box 750, Uravan	Uranium, Vanadium	Mine
New Cliff Dweller	Atkinson Mesa	Paul Smith & Oran Thompson, Box 293, Nucla	Uranium, Vanadium	Mine
New Firebird	Middle Long Park	Lark Washburn, Box 750, Uravan	Uranium, Vanadium	Mine
New Good Hope	Eagle Basin	Russell Mayfield, Box 222, Nucla	Uranium, Vanadium	Mine
New Happy	Long Park	R. C. Williams, Nucla	Uranium, Vanadium	Mine
New Moonbeam	Long Park	Lark Washburn, Box 750, Uravan	Uranium, Vanadium	Mine
North Hummer	Monogram Mesa	Lowell Staats, Box 331, Nucla	Uranium, Vanadium	Mine
North Star	Dolores Rim	Jerry Mayfield, Box 222, Naturita	Uranium, Vanadium	Mine
Nil No. 2	East Paradox	Union Carbide Nuclear Co., Uravan	Uranium, Vanadium	Mine
Nucla Group	Atkinson Mesa	Woodrow Gripe, Naturita	Uranium, Vanadium	Mine
Opera Box	Monogram Hill	C. N. Athey, Box 156, Naturita	Uranium, Vanadium	Mine
Ophir	Dolores Rim	Cecil Bunker, Nucla	Uranium, Vanadium	Mine
Oregon	Dolores Rim	Reed, Belisle & Reed, Box 325, Naturita	Uranium, Vanadium	Mine
Oversite	Monogram Mesa	Lark Washburn, Box 750, Uravan	Uranium, Vanadium	Mine
Paddy No. 4	Bull Canyon	Robert P. Carber, Nucla	Uranium, Vanadium	Mine
Paradox Nos. 5, 6	Monogram Mesa	Union Carbide Nuclear Co., Uravan	Uranium, Vanadium	Mine
Paradox D	Monogram Mesa	Booth Eckman, Box 127, Nucla	Uranium, Vanadium	Mine
Pay Day, Point Empire	Martin Mesa	Cliff Carter, Box 251, Uravan	Uranium, Vanadium	Mine
Peanut No. 1	Upper Bull Canyon	Ed S. Smith, Box 285, Naturita Gerald Clifford Randolph, Naturita	Uranium, Vanadium	Mine
Peanut No. 2	Upper Bull Canyon	Louis P. Giggini, 2998 F Road, Grand Junction	Uranium, Vanadium	Mine
Peanut Nos. 3, 4	Upper Bull Canyon	A. C. Rinderle, 404 Sherman Drive, Grand Junction	Uranium, Vanadium	Mine
Peggy Nos. 1, 2	Saucer Basin	Norman Morrison, Nucla	Uranium, Vanadium	Mine
Phonograph	Long Park	Lark Washburn, Box 750, Uravan	Uranium, Vanadium	Mine
Picket Corral No. 2	Bull Canyon	Don & Keith Andrews, Box 87, Nucla	Uranium, Vanadium	Mine
Pluto	Monogram Mesa	Cole & Bond, Box 397, Nucla	Uranium, Vanadium	Mine
Production	Long Park	O'Bryant & Powell, Box 124, Uravan	Uranium, Vanadium	Mine

R. A. M.	Club Mesa	Lark Washburn, Box 750, Uravan	Uranium, Vanadium	Mine
Radium Hills	Bull Canyon	E. E. Lewis, Box 1481, Grand Junction	Uranium, Vanadium	Mine
Radium Queen No. 13	Carpenter Ridge	Cecil Crandall, Redvale Carl L. Nichols, Box 382, Fruita Githon Reed, Naturita	Uranium, Vanadium	Mine
Rajah	Rock Creek	Woodrow Gripe, Naturita	Uranium, Vanadium	Mine
Rattlesnake & Sesmo	Long Park	Art Thompson, Box 501, Uravan	Uranium, Vanadium	Mine
Raven & Pearl Walker	Saucer Basin	Marion Trone, Uravan Clair Albano, Box 522, Nucla	Uranium, Vanadium	Mine
Red Bird	Carpenter Ridge	O. E. Smart, Box 296, Nucla	Uranium, Vanadium	Mine
Red Bird No. 2	Carpenter Ridge	Cecil Bunker, Nucla Clayton Ages, Nucla	Uranium, Vanadium	Mine
Red Flag	Bull Canyon	Reed & Arnold, Box 298, Naturita	Uranium, Vanadium	Mine
Red Rock No. 5	Martin Mesa	Red Rock Mining Co., Box 233, Naturita	Uranium, Vanadium	Mine
Red Sox	Dolores Rim	Frank Elder, Nucla	Uranium, Vanadium	Mine
Rigel	Monogram Bench	Joe Weaver, Box 393, Nucla	Uranium, Vanadium	Mine
Renegade	Atkinson Mesa	Rex Uranium Co., Farmington, New Mexico	Uranium, Vanadium	Mine
Rim Rock	Wedding Bell	J. C. Southerland, Naturita	Uranium, Vanadium	Mine
Rim Rock No. 2	Wedding Bell	Ed. Johannsen, Box 117, Nucla	Uranium, Vanadium	Mine
Rim Rock No. 3	Wedding Bell	Harold Price, Box 74, Nucla	Uranium, Vanadium	Mine
Rim Rock No. 5	Wedding Bell	Jones & Jones, Box 183, Naturita	Uranium, Vanadium	Mine
Rim Rock Blues Nos. 2, 5	Bull Canyon	Adolphus Moore, Box H, Naturita	Uranium, Vanadium	Mine
Rim Rock Blues Nos. 6, 9, 12, 14	Bull Canyon	Robert E. Severs, Box 843, Uravan John Ricks, Box 207, Uravan	Uranium, Vanadium	Mine
Rim Rock Blues No. 17	Bull Canyon	Wm. & Grant Burnett, 179 Rainbow Drive, Grand Junction Union Carbide Nuclear Co., Uravan	Uranium, Vanadium	Mine
Roy H. Quinn	Four Corners	Roy H. Quinn Drilling Co., Box 195, Naturita		Drilling
Ruth Ellen	Atkinson Mesa	Cole & Bond, Box 397, Nucla	Uranium, Vanadium	Mine
St. Patrick	Long Park	Neilson & Klingensmith, Box 875, Uravan	Uranium, Vanadium	Mine
San Miguel No. 10	Hieroglyphic Canyon	Wm. Elrick, Box 663, Nucla	Uranium, Vanadium	Mine
Sandy	Dolores Rim	Douglas Cleghorn, Box 502, Uravan	Uranium, Vanadium	Mine
September Morn	Bull Canyon	Wm. G. Jewell, Box 125, Redrock	Uranium, Vanadium	Mine
Shamrock	Club Mesa	Lark Washburn, Box 750, Uravan Jerry Mayfield, Box 222, Naturita	Uranium, Vanadium	Mine
Sphinx	Long Park	Neilson & Klingensmith, Box 875, Uravan	Uranium, Vanadium	Mine
Star No. 3	Spring Creek Mesa	Eugene M. Barnes, Box 235, Uravan	Uranium, Vanadium	Mine
Star No. 6	Spring Creek Mesa	Lark Washburn, Box 750, Uravan	Uranium, Vanadium	Mine
Starlight No. 7	Bull Canyon	Reed & Arnold, Box 298, Naturita	Uranium, Vanadium	Mine
Sunbeam	Long Park	Dale Souther, Redvale	Uranium, Vanadium	Mine
Sunflower	Middle Long Park	Clarence Neilson, Box 875, Uravan	Uranium, Vanadium	Mine
T.N.T. No. 3, M.L. No. 15	Long Park	Ben Brito, Box 626, Delta Golden Cycle Corp., Colorado Springs	Uranium, Vanadium	Mine
Three Jacks	La Sal Creek	Ernest Berry, Box 237, Grand Junction	Uranium, Vanadium	Mine

MONTROSE COUNTY—Continued

Name of Property	Location	Operators Name and Address	Product	Kind of Property
Thunderbolt	East Paradox	Walt Burnett, Box 386, Nucla	Uranium, Vanadium	Mine
Townhouse	Dolores Rim	Cole & Bond, Box 397, Nucla	Uranium, Vanadium	Mine
Tripod Group	Long Park	Lark Washburn, Box 750, Uravan	Uranium, Vanadium	Mine
Uravan Plant U.C.N.C. Mill	Uravan	Union Carbide Nuclear Co., Uravan	Uranium, Vanadium	Plant
Uranium Girl	La Sal Creek	Donald Dale, 707 W. 7th, Cortez	Uranium, Vanadium	Mine
Uranus	Monogram Bench	Carl Tucker, Grand Valley	Uranium, Vanadium	Mine
Uravan No. 2	Long Park	J. W. Emmons, Box 161, Naturita	Uranium, Vanadium	Mine
Vaden View	Wild Steer Canyon	Delbert Barker, Box 263, Nucla	Uranium, Vanadium	Mine
Valentine	Long Park	Lark Washburn, Box 750, Uravan	Uranium, Vanadium	Mine
Valley View Group	Carpenter Ridge	Carl Nichols, Box 382, Fruita	Uranium, Vanadium	Mine
Van Group	Paradox Valley	Luther Brickey, Box 151, Naturita	Uranium, Vanadium	Mine
Vanadate	Long Park	Delbert Barker, Box 263, Nucla	Uranium, Vanadium	Mine
Vanadium King	Long Park	Lawrence Ross, Placerville	Uranium, Vanadium	Mine
Virgin	Long Park	Delbert Bunker, Nucla	Uranium, Vanadium	Mine
Wedge	Lion Creek	De Var Shumway, 215 Landsdown, Grand Junction	Uranium, Vanadium	Mine
Whang Doodle	Wild Steer Canyon	Delbert Barker, Box 263, Nucla	Uranium, Vanadium	Mine
Whitney Shaft	Long Park	De Var Shumway, 215 Landsdown, Grand Junction	Uranium, Vanadium	Mine
Worcester	Dolores Rim	Worcester Mines, Box 844, Uravan	Uranium, Vanadium	Mine
Yip Yip Group & Two High	Wray Mesa	Carl Nichols, Box 382, Fruita	Uranium, Vanadium	Mine

OURAY COUNTY

Name of Property	Location	Operators Name and Address	Product	Kind of Property
American Nettie	Gold Hill	W. R. Nichols & O. C. Baker, 508 Main, Montrose	Gold, Silver, Lead, Copper	Mine
Atlas	Sneffels	Idarado Mining Co., Ouray	Base Metals	Mine
Bachelor	Dexter Creek	Bay City Mining & Milling Co., Inc., 1550 Clarkson St., Denver	Silver, Lead, Zinc	Mine
Camp Bird	Ouray	Camp Bird Colorado, Inc., First Nat'l Bank Bldg., Denver	Gold, Silver, Lead, Copper, Zinc	Mine
Edna Nos. 1-6	Ironton Park	St. Germain Foundation, Ouray	Lead, Zinc	Mine
Francis No. 2 (Ruby Trust)	Sneffels	Francis Consolidated Mining & Development Co., Box 6, Ouray	Base Metals	Mine
Francis Mill	Sneffels	Francis Consolidated Mining & Development Co., Box 6, Ouray	Base Metals	Mill
Idarado	Red Mountain	Idarado Mining Co., Ouray	Gold, Silver, Lead, Copper, Zinc	Mine
Keno	Brown Mountain	C. & C. Mining Co., 402 Ouray Ave., Grand Junction	Gold, Silver, Lead	Mine
Little Balm of Gilead	Ouray	Karl K. Orvis, Ridgeway	Silver, Lead, Zinc	Mine
Mineral Farm	Ouray	M. W. Waldrum, Box 526, Ouray	Silver, Lead, Zinc, Tourist	Mine
Monarch	Poughkeepsie Gulch	Ouray Uranium Co., Box 992, Moab, Utah	Gold, Silver, Lead, Copper, Zinc	Mine
Rouville	Red Mountain	Ernest Hoffman, Box 388, Silverton	Gold, Silver, Lead, Copper	Mine

Wewissi	Diamond Creek	Warren Kuykendall, Box 195, Naturita	Gold, Silver, Lead, Copper, Zinc	Mine

PARK COUNTY

Alma Placer	Alma	Blalock Const. Co., Box 353, Pauls Valley, Oklahoma	Gold	Placer
Ber No.14	Colo. Springs	George McCall, 1004 Skyway Blvd., Colorado Springs	Beryl	Mine
Betty	Guffey	D.M.F. Co., Inc., 833 E. Platte Ave., Colorado Springs	Gold, Lead, Zinc, Copper	Mine
Boomer	Badger Flats	U. S. Beryllium Co., Bondurant Bldg., Pueblo	Beryl	Mine
E. & P. Placer	Alma	Evans-Parker Oil Co., Rte. 1, Dewey, Oklahoma	Gold	Placer
Hoosier	Hoosier Pass	Mazzoco Const. Co., Box 1298, Colorado Springs		Water Tunnel
J Shaft	Lake George	Minerva Oil Co., 1129 Colorado Ave., Grand Junction	Beryl	Mine
J. S.	Badger Flats	C Y W Y D Mining Co., Lake George	Beryl	Mine
Redskin	Lake George	U. S. Beryllium Co., Bondurant Bldg., Pueblo	Beryl	Mine
Roberts Tunnel (East Portal)	Grant	Blue River Constructors, Box 5, Grant		Water Tunnel

PITKIN COUNTY

Montezuma	Montezuma Basin	Montezuma Industries, Inc., Box 175, Aspen	Gold, Silver, Lead, Copper, Zinc	Mine
Pitkin Iron Mine	Iron Mountain	Pitkin Iron Corp., Box 217, Carbondale	Iron	Mine
Star No. 1	Independence Pass	Charles Howie, 2612 No. 7th St., Grand Junction	Silver, Lead	Mine
Woody Creek	Woody Creek	Morrison Knudsen Co., Inc., Box 217, Carbondale	Iron	Crusher

PUEBLO COUNTY

Chamblin	Pueblo	Standard Fire Brick Co., 26th & Santa Fe, Pueblo	Clay	Mine
Kathryn	Turkey Creek	Cotter Corp., Canon City	Uranium	Mine
Nellie Helen	Stone City	Arthur L. Wands, Stone City	Clay	Mine
Numbers 2, 5	Stone City	General Refractories Co., 721 W. 3d St., Pueblo	Clay	Mine
Open Pit Mine	Stone City	General Refractories Co., 721 W. 3d St., Pueblo	Clay	Mine
Rock Creek	Rock Creek	Raymond Moore, Rye Standard Fire Brick Co., 26th & Santa Fe, Pueblo	Clay	Mine

RIO BLANCO COUNTY

Name of Property	Location	Operators Name and Address	Product	Kind of Property
Butterfly	Uranium Peak	Lyle Francis, Box 577, Meeker	Uranium	Mine
Coal Creek No. 1	Meeker	Wm. Moulton & Wm. Meese, Box 226, Rifle	Uranium	Mine
Columbine No. 1	Uranium Peak	Devereaux Bros., Box 373, Meeker	Uranium	Mine
Midnight	Uranium Peak	J & H Mining Co., Box 643, Meeker	Uranium	Mine
Shylo No. 2	Meeker	John & Robert Dade, Green River, Utah	Uranium	Mine
RIO GRANDE COUNTY				
Reynolds Tunnel	Summitville	John Rigg, 1500 E. 7th Ave., Denver	Gold, Silver, Copper	Mine
ROUTT COUNTY				
McCoy Cinder Pit	McCoy	McCoy Aggregate Co., McCoy	Volcanic Scoria	Quarry
SAGUACHE COUNTY				
Antoro	Bonanza	American Industrial Leasing Co., Superior Mines Division, Box 127, Salida	Silver, Lead, Zinc	Mine
Copperhead	Mineral Hot Springs	Gendev Mining Corp., 1014 Zodak Drive, Colorado Springs	Gold, Silver, Copper	Smelter
East	Cochetopa Creek	Gunnison Mining Co., Box 539, Gunnison	Uranium	Mine
Embargo	Del Norte	Monon Leasing Co., Creede	Silver, Lead, Zinc	Mine
Essie	Raleigh Gulch	Rico Mining Co., 1536 So. Stuart St., Denver 19	Gold, Lead, Silver	Mine
Marine Lode	Raleigh Gulch	Tom Amer, Villa Grove	Gold, Lead, Silver, Copper, Zinc	Mine
New Lookout	Harry Creek	Gibraltar Minerals Co., Box 114, Gunnison	Uranium	Mine
Pitch Tunnel	Indian Creek	Pinnacle Exploration, Inc., Box 598, Gunnison	Uranium	Mine
Rawley No. 12	Bonanza	American Industrial Leasing Co., Superior Mines Division, Box 127, Salida	Silver, Lead, Zinc	Mine
T No. 2	Cochetopa Creek	Gunnison Mining Co., Box 539, Gunnison	Uranium	Mine
Thornburg	Cochetopa Creek	Gunnison Mining Co., Box 539, Gunnison	Uranium	Mine
Turquoise Lode	Villa Grove	Villa Grove Turquoise Co., Box 171, Villa Grove	Turquoise	Quarry
Warwick	Bonanza	Joseph D. Blunt, 829 Macon Ave., Canon City	Silver, Lead, Zinc	Mine
West Mine	Cochetopa Creek	Gunnison Mining Co., Box 539, Gunnison	Uranium	Mine
SAN JUAN COUNTY				
American Tunnel	Gladstone	Standard Metals Co., 264 So. 4th St., Moab, Utah	Gold, Silver, Lead, Copper, Zinc	Mine

Auburn Group	Eureka	C. A. McLelland, Box 442, Silverton	Base Metals	Mine
Blackhawk	Cement Creek	Leo Searle, Box 541, Silverton	Base Metals	Mine
Burbank Tunnel	Ice Lake	Denver Golden Corp., Box 517, Silverton	Gold, Silver, Lead, Copper, Zinc	Mine
Clear Lake	Clear Lake	Leo Searle, Box 541, Silverton	Base Metals	Mine
Columbus Group	Animas Forks	Jack Dick, Box 151, Delta	Gold, Silver, Lead, Copper, Zinc	Mine
Elk Group	Elk Park	Gaddis Mining Co., 1500 Mile High Center, Denver	Uranium	Mine
Greysill Group	Hermosa Creek	Vanadium Corp. of America, Durango	Uranium, Vanadium	Mine
Katy	King Solomon	Odie Cross, Box 391, Silverton	Gold, Silver, Lead, Copper, Zinc	Mine
Lackawanna Mill	Silverton	T. A. Denny, Box 427, Silverton	Lead, Zinc, Copper	Mine
Little Dora	Silverton	Fall River Exploration & Mining Co., Box 32, Idaho Springs	Gold, Silver, Lead, Copper, Zinc	Mine
Little Giant	Silverton	Howard Bowles & Kenneth Waggnor, Box 457, Silverton	Base Metals	Mine
Little Ida	California Gulch	Warren Kuykendall, Naturita	Base Metals	Mine
Little Rabbit Placer	Lime Creek	Lloyd Pavish, Lake City	Gold, Silver	Placer
Longfellow	Red Mountain	Halliburton Oil Producing Co., 2915 Classen Blvd., Oklahoma City, Oklahoma	Silver, Lead	Mine
Mill Cleanups	Howardsville	Delbert McCluskey, 117 So. 9th St., Grand Junction	Gold, Silver, Lead, Copper, Zinc	Mine
Osceola	Howardsville Gulch	T. A. Denny, Box 372, Silverton	Base Metals	Mine
Pride Mill	Cunningham	Fall River Exploration & Mining Co., Box 32, Idaho Springs	Gold, Silver, Lead, Copper, Zinc	Mine
Queen Anne	Cement Creek	Robert B. Daniel, 2682 G Road, Grand Junction	Base Metals	Mine
Rainbow (Richardson Group)	Anvil Mountain	Frank Richardson, Box 546, Ouray	Gold, Silver, Lead, Copper, Zinc	Mine
Richardson No. 1 (Brooklyn)	Anvil Mountain	Frank Richardson, Box 546, Ouray	Gold, Silver, Lead, Copper, Zinc	Mine
Shenandoah (Mayflower)	Silverton	Standard Metals Co., 264 So. 4th St., Moab, Utah	Gold, Silver, Lead, Copper, Zinc	Mine & Mill
Silver Wing	Animas Canyon	Robert London, Box 217, Naturita	Base Metals	Mine
Standard Mill	Silverton	Standard Metals Co., 264 So. 4th St., Moab, Utah	Gold, Silver, Lead, Copper, Zinc	Mill
Sultan Tunnel	Silverton	Fall River Exploration & Mining Co., Box 32, Idaho Springs	Gold, Silver, Lead, Copper, Zinc	Mine
Sunburst (Katy Group)	King Solomon	Sipe-Silverton Associates, Inc., Silverton	Base Metals	Mine
Terry Tunnel	Eureka Creek	Standard Metals Co., 264 So. 4th St., Moab, Utah	Base Metals	Mine

SAN MIGUEL COUNTY

Name of Property	Location	Operators Name and Address	Product	Kind of Property
Al	Hastings Mesa	Albert Granger, 1301 Main St., Montrose	Gold, Silver	Mine
Andrus	Ingram Basin	East Ridge Mining Co., 633 S. Shatto Place, Los Angeles, California	Base Metals	Mine
April No. 1	Slick Rock	Lyle Francis, Grand Junction	Uranium, Vanadium	Mine
Atlas & Clara	Trout Lake	John Montonati, 683 4th Ave., Durango	Silver, Lead	Mine
Bachelor	Bachelor Draw	Bachelor Mines, Dove Creek Marvin Randolph, Dove Creek	Uranium, Vanadium	Mine
Bean No. 3	Slick Rock	Dulaney Mining Co., 1st Nat'l Bank Bldg., Grand Junction	Uranium, Vanadium	Mine
Bean Patch Incline No. 3	Slick Rock	Dulaney Mining Co., 1st Nat'l Bank Bldg., Grand Junction	Uranium, Vanadium	Mine
Bob Falcon Incline	Egnar	Joe Gomez, Box 23, Egnar	Uranium, Vanadium	Mine
Bog Iron Pit	Old Ophir	A. L. Campbell, 212 Petroleum Bldg., Grand Junction	Bog Iron	Mine
Buckhorn	Bean Patch	Charles E. Davis, Slick Rock	Uranium, Vanadium	Mine
Burro Nos. 1, 2, 5	San Miguel	Oscar Blixt, Box 192, Telluride	Gold	Mine
Burro Nos. 3, 5, 7	Slick Rock	Harold Foss, Slick Rock	Uranium, Vanadium	Mine
Burro Point	Wedding Bell	Frank Fedel, 1801 N. 14th, Grand Junction	Uranium, Vanadium	Mine
Brasier Bros.	Norwood	Brasier Bros. Const. Co., Norwood		Drilling
Carnation	Gypsum Valley	Lowell Staats, Box 337, Nucla	Uranium, Vanadium	Mine
Chilli No. 5	Hamm Bench	Virgil Nidiffer, Rte. 1, Grand Junction Ed Horn, Box 743, Rifle	Uranium, Vanadium	Mine
Cow Girl	Slick Rock	Davis Mining Co., Dove Creek	Uranium, Vanadium	Mine
Deluxe	Horse Range	E. J. Johannsen & Elwood Kelly, Box 117, Nucla	Uranium, Vanadium	Mine
Deremo	Egnar	Union Carbide Nuclear Co., Dove Creek	Uranium, Vanadium	Mine
Double Buck	Mule Shoe Bend	Leo Maley, Dove Creek	Uranium, Vanadium	Mine
Falcon	Slick Rock	Joe Gomez, Box 23, Egnar	Uranium, Vanadium	Mine
Fall Creek	Fall Creek	Vanadium Corp. of America, Durango	Vanadium	Mine
Fall Creek Quarry	Fall Creek	Garruth Mining & Development Co., Ridgeway	Stone	Quarry
Firefly No. 3	Slick Rock	Joe Gomez, Box 23, Egnar	Uranium, Vanadium	Mine
Florence Group	Bean Patch	Charles E. Davis, Slick Rock	Uranium, Vanadium	Mine
Fraction	Slick Rock	W. D. Tripp, Box 291, Dove Creek	Uranium, Vanadium	Mine
Frenchie Point	Slick Rock	Clyde Sanchez Mining Co., Box 314, Dove Creek	Uranium, Vanadium	Mine
Garibaldi-San Bernardo	Matterhorn	Hugh Thomas, Ophir	Gold, Silver, Lead, Copper, Zinc	Mine
Governor No. 2	Bishop Canyon	Joe Dowd, Jr., Moab, Utah	Uranium, Vanadium	Mine
Groundhog Dump	Wedding Bell	Rex Holland, Box 243, Naturita	Uranium, Vanadium	Mine
Hangover	Slick Rock	Burwell Mining Co., Egnar	Uranium, Vanadium	Mine
Hawk No. 2	Egnar	Burwell Mining Co., Egnar Clyde Sanchez Mining Co., Box 314, Dove Creek	Uranium, Vanadium	Mine
Himes Drilling	Gypsum Valley	Himes Drilling Co., 2870 Uniweep, Grand Junction		Drilling

Horseshoe No. 5	Horseshoe Bend	Jack Milling, Egnar	Uranium, Vanadium	Mine
Hotz Incline (Summit Group)	Slick Rock	Don Tripp, Box 291, Dove Creek	Uranium, Vanadium	Mine
Jack Knife No. 3	Wedding Bell	Dan Johnson, 1211 S. 5th, Grand Junction	Uranium, Vanadium	Mine
King No. 2	Slick Rock	Gerald Randolph, Box 333, Naturita	Uranium, Vanadium	Mine
King No. 4	Slick Rock	Earl Hotz, Slick Rock Chas. Pickens, Box 246, Mancos	Uranium, Vanadium	Mine
King Shaft Fraction	Egnar	Clyde Sanchez Mining Co., Box 314, Dove Creek	Uranium, Vanadium	Mine
Latricia	Slick Rock	Golden Cycle Corp., Colorado Springs Jesse Crawford, Box 138, Yellow Jacket	Uranium, Vanadium	Mine
Little Jimmie	Valley View Draw	Little Jimmie Mining & Leasing Co., Telluride	Gold, Silver	Mine
Lone Star Nos. 1, 2	Dolores River Bridge	K. S. Gurwell, Cortez	Uranium, Vanadium	Mine
Lucky Day	Spud Patch	Clyde Sanchez Mining Co., Box 314, Dove Creek	Uranium, Vanadium	Mine
Lucky J	Bull Canyon	James Thomas, Box 164, Green River, Utah	Uranium, Vanadium	Mine
Magpie	Gypsum Valley	Brasier Bros. Const. Co., Norwood Golden Cycle Corp., Coloardo Springs Wm. Hardin, Redvale	Uranium, Vanadium	Mine
Mainstreet No. 2	Wedding Bell	Dan Sheek & James Turner, Box 234, Naturita	Uranium, Vanadium	Mine
Marne	Spud Patch	O. W. Woodward, 2061 So. Broadway, Grand Junction	Uranium, Vanadium	Mine
Mary Jane Group	Hamm Canyon	Dan Sheek, Naturita	Uranium, Vanadium	Mine
May Nos. 2, 3	Slick Rock	E. E. Lewis, Inc., Box 1481, Grand Junction	Uranium, Vanadium	Mine
Middle Group	Slick Rock	Watters Lease, Cortez	Uranium, Vanadium	Mine
New Uncle Sam	Gypsum Valley	Jesse Crawford, Redvale	Uranium, Vanadium	Mine
North Slope	Haden Peak	North Slope Mining Co., Rte. 2. Montrose	Gold, Silver, Lead, Copper, Zinc	Mine
Norther Nos. 5, 6	Horse Range	E. D. Johannsen, Nucla Wm. Barnett, Box 305, Dove Creek	Uranium, Vanadium	Mine
Northern Light	Slick Rock	Glenn D. Kimball, Rte. 1, Ignacio	Uranium, Vanadium	Mine
Paper Ore Body	Slick Rock	E. E. Lewis, Inc., Box 1481, Grand Junction	Uranium, Vanadium	Mine
Pandora	Telluride	Idarado Mining Co., Ouray	Gold, Silver, Lead, Copper, Zinc	Mine
Pandora Mill	Telluride	Idarado Mining Co., Ouray	Gold, Silver, Lead, Copper, Zinc	Mill
Parrot Drift	Mule Shoe Bend	Wm. Burwell, Egnar	Uranium, Vanadium	Mine
Penigal Group	Spud Patch	Clyde Sanchez Mining Co., Box 314, Dove Creek	Uranium, Vanadium	Mine
Pioneer	Egnar	Wm. Burwell, Egnar	Uranium, Vanadium	Mine
Pitch Fork No. 1	Gyp Valley	Howard Hollen, 2928 Highway 50, Grand Junction Rudakel Mining Co., Box 157, Naturita Willis Kelly, Redvale	Uranium, Vanadium	Mine

SAN MIGUEL COUNTY—Continued

Name of Property	Location	Operators Name and Address	Product	Kind of Property
Pond	Gypsum Valley	W. H. Hardin, Redvale E. D. Etzler, c/o Basin Station, Redvale	Uranium, Vanadium	Mine
Porcupine	Wild Boy Lake	Benson, Benson & Timmerman, Telluride	Silver, Lead	Mine
Prospectors Fortune	Island Mesa	Ruth C. Roberts, Egnar	Uranium, Vanadium	Mine
Radium No. 5	Slick Rock	Dulaney Mining Co., First Nat'l Bank Bldg., Grand Junction	Uranium, Vanadium	Mine
Red Horse and Rainy Day	Hamm Bench	Harold Price, Box 74, Nucla	Uranium, Vanadium	Mine
Red Rock	Mineral Mountain	American Eagle Leasing Co., Box 343, Norwood	Uranium, Vanadium	Mine
Roy Lee	Mule Shoe Bend	Rockwell Mining Co., Dove Creek	Uranium Vanadium	Mine
S. B. No. 9 Group	Egnar	Trenton Davis, Box 412, Dove Creek	Uranium, Vanadium	Mine
S. K. Rim	Slick Rock	Earl Hotz, Slick Rock Chas. Pickens, Box 246, Mancos	Uranium, Vanadium	Mine
Sage No. 11	Bishop Canyon	Uranium Shares Inc., Box 53, Egnar	Uranium, Vanadium	Mine
St. Louis Tunnel-Alta	Turkey Creek	Silver Mountain Mining Co., 5202 Roland Road, Peoria, Illinois Keith & Chas. Benson, H. C. Timmerman, Telluride	Silver, Lead	Mine
San Juan	Matterhorn	Dan F. Hunter, Box 125, Telluride	Gold, Lead, Zinc, Copper	Mine
Slick Rock Concentrator	Slick Rock	Union Carbide Nuclear Co., Slick Rock	Uranium, Vanadium	Plant
Special Session	Elk Creek Basin	Fred Sellan, Grand Junction	Gold, Silver	Mine
Strawberry Roan	Bishop Canyon	Tom Thompson, Box 65, Egnar	Uranium, Vanadium	Mine
Sunday No. 2	Gypsum Valley	Leslie Thompson, Ridgway	Uranium, Vanadium	Mine
Summit Incline Fraction	Slick Rock	King Koenig, Box 33, Egnar W. D. Tripp, Box 291, Dove Creek	Uranium, Vanadium	Mine
Tiny (Discovery Cut)	Gyp Valley	W. H. Hardin, Redvale	Uranium, Vanadium	Mine
Two Bars	Gyp Valley	W. H. Hardin, Redvale	Uranium, Vanadium	Mine
Vanadium Queen	McIntyre Canyon	Carl L. Nichols & Carl Weaver, Box 382, Fruita	Uranium, Vanadium	Mine
Veta Mad & Veta Glad	Slick Rock	Hotz & Pickens, Mancos O. C. Brown, c/o Gayno Mining Co., Montrose	Uranium, Vanadium	Mine
Warren Placer	Alta Mine Dump	Benson, Benson & Timmerman, Box 544, Telluride	Gold, Silver, Lead, Copper	Placer
West End	Wedding Bell	David Pace, Naturita	Uranium, Vanadium	Mine
Wilmarth	Gypsum Valley	Jesse Crawford, Yellow Jacket	Uranium, Vanadium	Mine
Windswept	Gypsum Valley	W. H. Hardin, Redvale	Uranium, Vanadium	Mine

SUMMIT COUNTY

Name of Property	Location	Operators Name and Address	Product	Kind of Property
Alliance	Gibson Hill	R. C. Moffitt, Box 338, Breckenridge	Gold, Silver, Lead	Mine
Blue River Placer	Breckenridge	Blue Beach Mining Co., Breckenridge	Gold	Placer
Buffers Lake	Climax	Boyles Bros. Drilling Co., 1321 S. Main St., Salt Lake City, Utah		Core Drilling
Dillion Dam Diversion Tunnel	Dillon	F. H. Linneman, Inc., 1300 Harlan St., Denver		Water Tunnel
Fannie Placer	Breckenridge	Aura Lee Engineering Co., Box 385, Breckenridge	Gold	Placer

Gagen Tunnel	Kokomo	Gold Hill Mines, 1808 19th St., Golden	Gold	Mine
Galena Gulch Placer	Galena Gulch	Wiedmer & Langely, Box 187, Breckenridge	Gold	Placer
Iron Mass Group	Breckenridge	Melvin E. Tellett, Breckenridge	Gold, Silver, Lead, Zinc	Mine
McCullough Tunnel	McCullough Gulch	John W. Brown Const. Co., 5700 N. Broadway, Denver		Water Tunnel
Montezuma Shaft	Loveland Pass	Blue River Constructors, Dillon		Tunnel
Ophir Placer	Gold Run Gulch	Wiedmer & Langely, Box 187, Breckenridge	Gold	Placer
Roberts Tunnel	Dillon	Blue River Constructors, Dillon		Water Tunnel
Ryan Crushing & Screening	Climax	C. Ryan & Son, Box 378, Climax	Sand, Gravel	Plant
Shoe Basin	Montezuma	Montezuma Mining & Oil, Inc., Montezuma	Gold, Silver, Lead, Zinc	Mine
Teller Basin Mill	Montezuma	Montezuma Mining & Oil, Inc., Montezuma	Lead, Zinc	Mine
Washington	Breckenridge	R. J. Webb & Mike Vinson, Box 365, Breckenridge	Gold, Silver, Lead, Zinc	Mine

TELLER COUNTY

Ajax	Battle Mountain	Golden Cycle Corp., Box 127, Cripple Creek	Gold	Mine
Alpen Meadow Bog	Gillette	Alpen Meadows, Inc., Box 1074, Colorado Springs	Peat	Peat Bog
Black Cloud	Divide	Herb Crisler, Lake George	Quartz	Quarry
Carlton Mill	Victor	Golden Cycle Corp., Box 127, Cripple Creek	Gold, Silver	Mill
Deadwood	Cripple Creek	Deadwood Leasing Co., Box 156, Cripple Creek	Gold	Mine
El Paso	Beacon Hill	El Paso Gold Tours, Inc., Box 155, Cripple Creek	Gold, Tourist	Mine
Grace Greenwood	Cripple Creek	Peiffer & Co., Box 245, Cripple Creek	Gold	Mine
Little May	Beacon Hill	John & Earl Robush, Cripple Creek	Gold	Mine
Molly Kathleen	Tenderfoot Hill	Black Diamond Mining Co., Box 798, Cripple Creek	Gold, Tourist	Mine
Pikes Peak	Guffey Road	Al Harre, Woodland Park	Granite	Quarry
Theresa Shaft	Victor	United Gold Mines, Box 86, Colorado Springs	Gold	Mine

WELD COUNTY

Commander	Greeley	Sterling Contracting Co., Rte. 3, Box 560, Ft. Collins	Base Material	Plant

HIGHWAYS & PROJECTS

County	Location	Operators Name & Address	Project
Routt	Rabbit Ears Pass	Amis Const. Co., 1647 Exchange Avenue., Oklahoma City, Oklahoma	Highway
Mesa	Mesa County	Beard. Wallace, 2041 N. 8th St., Grand Junction	Construction

HIGHWAYS & PROJECTS—Continued

County	Location	Operators Name & Address	Project
Clear Creek	Idaho Springs	Colorado Constructors, Inc., 725 W. 39th Ave., Denver	Twin Tunnels
Mineral	Wagon Wheel Gap & Creede		Road Construction
Gunnison	From Cochetopa Creek 5 miles toward Gunnison		Highway
Gunnison	Monarch Pass to Sargents		Oiling Highway
Montrose	Black Canyon		Construction
Archuleta	Arboles, north, east and west		Highway
Mesa	Gateway to Uravan		Road Construction
San Miguel	Placerville toward Dallas	Corn Construction Co., Box 1501, Grand Junction	Re-oiling
Mesa	Four Corners		Highway
Mesa	North of Grand Junction		Highway
Montrose	Black Canyon to top of Terso	J. P. Elliott & Co., Box 201, Pueblo	Highway
Gunnison	Highway 114, West Pass Creek & East Creek between Saguache & Gunnison	Gardner Const. Co., Box 1751, Grand Junction	Highway
La Plata	Between Ignacio & Mayfield	W. A. Hamilton Const. Co., Gallup, New Mexico	Road
San Miguel	Placerville to Dallas	Harrison Const. Co., Box 1181, Englewood	Re-surfacing
La Plata	Highway 160 from Bayfield		Highway
La Plata	Northeast of Bayfield		Highway
Montezuma	Near Mancos, Four Corners		Highway
Archuleta	Navajo Dam	H. & S. Gravel Co., Inc., Platteville	Road
Boulder	So. St. Vrain	Hopkins Const. Co., 1340 So. Lipan, Denver	Highway
Moffat	Between Craig & Maybell	C. L. Hubner Co., 4473 E. Evans, Denver	Highway
Moffat	19 miles west of Craig		Highway
Grand and Jackson	Highways 40 & 14 between Kremmling & Heron		Highway
Fremont	10 miles north of Parkdale	Hunt Const. Co., Steamboat Springs	Highway
El Paso	Colo. Project S 0037		Highway
Jefferson	Turkey Creek	H. E. Lowdermilk, 1950 W. Dartmouth, Denver	Highway
Boulder	Peaceful Valley		Highway
Lake	Climax		Construction
Summit	Between Green Mt. Dam & Dillon		Highway
Custer	Between Silver Cliff & Wetmore		Highway
Delta	Southeast of Crawford on north approach to Black Canyon	C. E. Mills Const. Co., Rte. 2, Box 231, Montrose	Road
Montrose	Four Corners Area		Road

Montezuma	Cortez	Nielson Inc., Dolores	Construction
Dolores	From Dolores north in San Miguel & South		Road
Dolores, Montezuma	Between Stoner & Dolores	Northwestern Engineering Co., 6001 Colo. Blvd., Denver 16	Highway
Montezuma	Around Cortez		Road
La Plata	South, 4 miles		Road
La Plata	Durango		Road
Mesa	From Grand Junction	Pioneer Const. Co., Pueblo	Highway
El Paso	Highway 115, 10 miles south of Colorado Springs		Highway
Montezuma	Mancos, East & West	Charley Pender Const. Co., Cortez	Road
Routt	Between McCoy & Toponas	E. J. Rippey & Sons, New Castle	Highway
Gunnison	Cebolla Creek to top of 9 mile hill		Road
Garfield	Road to quarry, 2 miles west of Glenwood Springs		Road
Mesa	Grand Junction east 5 miles	Schmidt Const. Co., Box 53, Whitewater	Highway
Delta	12 miles northwest of Cedaredge	Siegrist Const. Co., 7000 York St., Denver 29	Road Building
Jackson	Kings Canyon		Highway
Weld	Highways in Weld County		Highway
Dolores	Near Cahone	Smith & Lucas, Box 157, Colorado Springs	Highway
Dolores	2 miles west of Dove Creek, 5 miles toward Egnar		Highway
Delta	From Cedaredge toward Grand Mesa		Highway
San Miguel	Top of Slick Rock Hill toward Egnar		Highway
Montrose	East of Crawford		Highway
Jefferson	Turkey Creek	Sterling Paving Co., Box 759, Ft. Collins	Highway
Grand	Winter Park	J. A. Tobin Const. Co., 5700 N. Broadway, Denver	Highway

COLORADO BUREAU OF MINES

MINERAL PRODUCTION IN THE STATE OF COLORADO

Year	Gold	Silver	Copper	Lead	Zinc	Uranium	Vanadium	Tungsten	Molybdenum	Total	Year
Previous to 1870	27,213,081	330,000	40,000							27,583,081	Previous to 1870
1870	3,015,000	660,000	20,000							3,695,000	1870
Total Production	30,228,081	990,000	60,000							31,278,081	Total Production
1871	3,633,951	1,029,058	30,000							4,693,009	1871
1872	2,646,463	2,015,001	45,000	5,000						4,711,464	1872
1873	1,835,248	2,383,014	65,000	7,078						4,290,340	1873
1874	2,065,395	3,086,926	90,197	37,502						5,280,020	1874
1875	2,721,055	2,873,391	90,000	95,706						5,380,352	1875
1876	2,726,511	2,950,256	70,000	81,774						5,828,541	1876
1877	3,000,000	4,180,138	93,797	98,491						7,372,426	1877
1878	3,366,404	4,807,001	89,000	481,502						8,743,907	1878
1879	3,225,000	10,162,503	131,000	1,960,207						15,478,710	1879
1880	3,350,000	15,155,302	164,000	3,395,939						22,065,241	1880
Total Production	58,248,108	49,334,790	947,994	6,363,199						114,894,091	Total Production
1881	5,300,000	15,104,092	161,000	3,900,621						24,465,713	1881
1882	5,360,000	14,436,136	276,390	5,401,000						25,473,526	1882
1883	4,100,000	14,912,756	182,771	6,096,125						25,291,652	1883
1884	4,250,000	13,984,066	278,601	4,724,742						23,237,409	1884
1885	4,200,000	17,014,927	127,435	4,345,000						25,687,362	1885
1886	4,450,000	12,315,404	44,990	5,463,400						22,271,794	1886
1887	4,000,000	11,345,608	226,350	5,670,000						21,241,958	1887
1888	2,758,000	14,813,906	270,089	5,790,200						23,632,165	1888
1889	3,883,859	17,499,486	426,250	5,423,400						26,937,995	1889
1890	4,150,000	19,665,245	945,000	4,683,200						29,443,445	1890
Total Production	97,699,967	195,174,416	7,887,020	58,060,867						354,772,290	Total Production
1891	4,600,000	20,906,554	883,400	5,568,000						31,957,954	1891
1892	5,300,000	23,082,600	837,375	5,030,790						34,250,765	1892
1893	7,527,000	20,305,785	765,533	3,147,971						31,646,291	1893
1894	9,349,731	14,638,696	824,097	3,200,000						28,012,524	1894
1895	13,359,954	11,683,232	639,050	2,954,714						28,636,950	1895
1896	15,267,234	14,450,536	820,270	2,321,109						32,867,149	1896
1897	19,579,637	12,697,448	960,917	2,731,032						35,964,034	1897
1898	23,534,531	15,690,265	1,304,504	4,117,043						42,646,343	1898
1899	26,508,676	15,771,751	1,869,170	6,170,766						48,520,343	1899
1900	28,762,036	12,488,775	1,293,012	7,770,196						50,314,019	1900
Total Production	251,888,766	352,745,038	15,904,350	101,072,418						719,608,572	Total Production
1901	27,679,445	10,901,366	1,303,297	6,419,172						46,303,280	1901
1902	28,517,117	8,325,192	1,106,108	4,325,484	2,544,993					44,708,894	1902
1903	21,605,359	7,079,711	1,033,643	4,501,123	4,353,264					38,573,100	1903
1904	24,223,000	7,416,157	1,205,607	4,624,515	5,515,788					40,783,075	1904
1905	25,577,947	7,747,719	1,536,266	5,438,507	4,774,498					45,070,937	1905
1906	22,308,754	8,499,735	1,644,002	5,666,993	5,298,602					45,898,066	1906
1907	20,471,527	7,886,736	2,251,258	4,965,517	5,275,377					40,850,415	1907
1908	22,695,576	4,975,428	1,383,735	2,429,671	1,798,603					33,283,011	1908
1909	21,946,664	4,387,643	1,220,642	2,765,512	2,295,046					32,615,527	1909
1910	20,297,536	4,392,736	1,048,835	3,158,381	3,366,437					32,263,925	1910
Total Production	487,491,699	434,541,461	27,757,741	145,167,253	35,020,608					1,117,958,762	Total Production
1911	19,012,732	5,921,415	1,146,135	2,925,397	5,696,188					32,731,867	1911
1912	18,691,577	5,023,961	1,445,416	3,280,703	8,591,624					37,033,281	1912
1913	18,148,711	5,515,107	1,240,901	3,716,231	6,218,607					34,839,577	1913
1914	21,233,174	4,617,402	923,411	2,910,681	4,574,110	400,000				34,658,778	1914
1915	22,414,944	3,563,180	1,344,684	3,234,098	12,969,749					43,426,655	1915
1916	19,153,821	5,038,072	2,121,524	4,893,072	17,994,252					49,200,741	1916
1917	15,729,221	6,018,837	2,217,307	5,847,141	12,272,209					42,084,715	1917
1918	12,751,718	7,063,554	1,350,501	4,683,214	8,111,185					34,160,172	1918
1919	9,886,627	6,448,971	662,198	1,964,722	2,717,096					21,679,614	1919
1920	7,576,319	5,896,175	744,047	3,730,383	3,952,050					21,898,974	1920
Total Production	652,120,543	477,648,135	41,033,865	182,352,915	118,117,678	400,000				1,469,673,136	Total Production
1921	6,835,528	5,631,657	535,794	884,721	118,000					14,005,500	1921
1922	6,373,419	5,855,911	455,416	1,291,246	1,525,706					15,501,698	1922
1923	6,391,629	4,374,280	634,472	3,198,875	3,682,336					18,471,590	1923
1924	6,493,540	2,173,168	370,336	3,681,757	3,729,915		500,000	150,000	3,350,000	22,448,716	1924
1925	7,227,022	5,127,816	535,191	5,478,042	4,683,196					20,831,267	1925
1926	7,078,033	2,935,372	476,539	5,519,024	4,875,000					20,883,968	1926
1927	5,279,118	2,145,871	742,846	4,206,671	4,590,656					16,965,162	1927
1928	5,304,876	2,370,568	1,237,629	3,103,100	4,359,182					16,375,535	1928
1929	4,417,358	2,343,802	1,567,293	3,080,064	3,884,826					17,293,344	1929
1930	4,517,619	1,687,398	1,366,820	2,213,000	3,480,864					13,265,701	1930
Total Production	714,238,483	510,293,978	48,746,201	215,009,415	150,847,359	400,000	500,000	150,000	3,350,000	1,643,535,436	Total Production
1931	4,822,734	656,815	745,015	509,416	1,230,174					7,942,154	1931
1932	6,661,271	496,052	441,091	115,220	7,781					7,721,415	1932
1933	6,206,676	765,149	618,688	177,711	107,898					7,876,122	1933
1934	11,356,070	2,246,892	903,520	512,095	66,392					14,884,969	1934
1935	12,297,145	5,399,114	1,204,476	429,530	93,342					17,423,497	1935
1936	12,831,245	4,571,700	1,631,160	668,564	117,200					19,819,869	1936
1937	12,911,675	4,842,646	2,646,028	1,154,748	552,110					22,107,207	1937
1938	12,861,560	5,127,819	2,777,516	869,860	457,088					22,075,663	1938
1939	12,839,850	5,767,515	2,748,720	772,868	190,320					22,519,041	1939
1940	12,856,760	6,905,393	2,746,352	1,147,600	637,560					24,293,665	1940
Total Production	819,885,261	545,052,871	65,206,767	221,167,015	154,287,124	400,000	500,000	150,000	3,350,000	1,809,997,038	Total Production
1941	15,301,015	5,192,718	1,592,528	1,433,436	2,358,300					23,877,397	1941
1942	9,401,945	2,301,750	266,684	2,004,254	5,991,990					19,896,623	1942
1943	4,814,530	1,874,501	267,280	2,704,800	9,524,304					19,705,415	1943
1944	5,900,925	1,399,168	282,960	2,834,680	9,109,740				[1] 23,608,421	45,911,494	1944
1945	3,532,725	1,583,488	400,950	2,931,568	8,227,790				[3] 19,384,393	37,272,828	1945
[4] 1946	4,991,455	1,810,042	568,746	5,713,848	8,819,668			306,096	8,774,200	32,541,700	1946
[4] 1947	5,889,765	2,314,676	900,000	5,384,448	8,911,350			500,000	10,000,000	37,479,061	1947
[5] 1948	5,418,070	2,725,117	997,332	9,001,194	12,015,624					30,155,537	1948
[4] 1949	3,391,630	2,620,018	946,782	8,485,348	11,830,344				12,000,000	44,579,784	1949
[4] 1950	4,563,680	3,160,688	1,306,656	7,291,890	13,000,384			611,650	13,000,000	47,549,096	1950
Total Production	879,358,971	570,154,637	72,739,253	266,979,681	344,074,818	400,000	500,000	1,367,746	90,117,014	2,146,366,775	Total Production
[6] 1951	4,077,648	2,523,171	1,554,608	10,496,256	30,279,896			1,187,601	22,300,000	68,136,559	1951
1952	4,360,790	2,346,489	1,745,304	9,681,252	17,663,346	[6] 50,000,000		1,997,602	27,875,650	210,284,549	1952
1953	4,172,420	1,987,414	1,687,560	5,686,710	8,664,570	[6] 75,000,000		2,811,064	37,306,341	250,000,640	1953
1954	5,325,000	5,077,172	2,013,600	4,814,400	7,714,500	[6] 118,000,000		5,575,495	45,192,856	337,915,451	1954
1955	5,157,000	2,354,000	3,182,000	4,723,000	8,708,000	[6] 121,000,000		4,500,000	45,536,600	381,707,951	1955
1956	7,632,445	2,519,740	5,963,300	6,702,200	11,968,750	[6] 124,500,000		4,600,000	44,237,000	406,031,523	1956
1957	7,090,475	2,645,000	5,605,000	6,145,195	11,851,666	40,425,000	12,495,000	2,598,325	50,109,464	353,512,126	1957
1958	2,584,546	1,140,136	1,673,196	5,568,174	9,948,433	44,769,175	12,019,357	1,648,231	50,472,019	515,954,008	1958
1959	1,921,625	1,077,215	1,646,937	5,060,881	8,269,752	49,404,126	12,793,095	3,365,000	65,696,000	333,863,633	1959
1960	1,995,136	1,512,288	2,254,966	4,420,555	8,172,924	51,682,365	15,603,408	5,609,632	62,038,147	376,534,093	1960
Total Production	911,606,034	591,311,505	96,663,706	336,278,304	357,336,655	675,180,664	53,411,060	35,258,916	501,081,091	5,177,285,388	Total Production
1961											1961
1962											1962
1963											1963
1964											1964
1965											1965

Year	Manganese	Beryl, Beryllium	Tin	Iron	Fluorspar	Limestone, Dolomite	Clay	Silica	Gypsum, Alabaster	Feldspar, Mica, Beryl	Vermiculite, Perlite	Stone	Sand & Gravel	Volcanic Ash, Pumice, Scoria	Loam, Peat, Soil Conditioner	Rare Earths	Cement	Gemstones	Natural Gas	Petroleum	Miscellaneous
1944					[2] 1,200,000	585,997	464,707	170,529	88,063	29,401	10,209	27,620	2,274								
1945				12,500		470,339	195,628	19,453	95,939	64,508		351,714			1,803						
[4] 1946				12,500	1,206,860	1,065,455	366,587	34,595	426,416	125,670		226,891		3,600				30,000			59,321
[4] 1947					1,066,015	1,415,018	433,607	15,998	152,749	237,478		276,090	670		12,500			50,000			107,699
[5] 1948																					
[4] 1949		5,945			594,952	1,476,621	507,257	10,127	196,664	504,313	91,253	1,677,068	675	14,286		2		1,200			174,919
[4] 1950			15,700		289,306	1,453,905	488,895	45,550	173,898	552,647	111,967	811,260						3,150			668,700
Total Production		5,945	15,700	25,000	4,157,111	6,467,535	2,456,681	294,052	1,115,729	1,514,217	213,429	3,370,675	5,619	17,886	14,303	2		64,550			1,010,639
[6] 1951			26,500		815,997	1,631,554	881,654	26,048	497,040	730,231	134,198	703,144						3,200			667,050
1952		40,472	35,000		1,456,281	5,057,578	700,888	18,145	377,460	615,573	242,463	879,063	5,300,000	10,000	6,000			8,538	4,289,600	76,274,105	1,094,950
1953	4,850	98,775	14,707	207,148	2,790,146	3,198,952	890,381	74,509	575,456	763,616	52,797	547,740		75,500	31,071	27,000	5,198,703	4,300	5,590,000	91,697,765	1,103,750
1954	5,200	35,400	10,617	186,930	5,127,000	2,426,760	1,040,332	43,600	246,300	280,350	45,366	1,917,805	8,358,300	64,870	49,720	23,440	5,277,030	8,230	7,219,600	117,515,360	1,090,000
1955		27,400	29,652	279,540	5,489,111	2,564,180	1,190,000	35,960	209,600	401,375	695,000	2,497,878	9,644,200	65,600	52,600	22,300	12,328,000	8,100	8,302,487	147,186,498	1,060,000
1956		38,000	20,000	500,000	5,340,515	2,906,248	1,409,380			422,140	723,200	2,363,532	10,889,000				13,150,000		6,000,000	160,867,778	1,448,715
1957		123,000	30,795	439,406	5,424,600	2,424,763	1,386,738			365,533	755,000	1,697,104	15,325,400				14,927,353		11,160,203	171,237,613	1,346,443
1958		59,748	16,567	1,216,498	3,126,768	2,337,195	1,716,635		185,000	275,485		450,545	14,282,015	63,481		5,513	19,142,962	15,600	17,424,409	144,747,010	1,087,072
1959	61,000	49,881	45,400	1,393,290	1,462,908	1,440,911	1,057,151		77,000	443,696		1,839,422	18,711,288	44,046		3,000	20,408,811	41,000	19,450,329	136,082,156	2,822,717
1960	81,200	293,345	37,620	1,145,536	1,239,444	1,347,345	1,143,785			384,578		2,349,608	15,559,778	67,632			17,042,416	34,360	23,787,087	137,659,948	[7] 23,089,882
Total Production	152,250	795,964	280,558	5,201,348	27,829,681	29,502,719	15,073,645	495,114	5,109,585	6,195,205	2,859,448	17,995,964	96,003,600	469,015	153,694	80,955	107,472,265	187,678	183,223,745	1,179,267,733	34,021,218

NOTES

The accompanying production tables have been compiled from the annual reports of the Colorado Bureau of Mines and show the dollar value for various mineral classifications as reported each year.

Many combinations of minerals have been reported in the annual reports but for these tables all similar minerals have been grouped together into thirty classifications. These classifications, together with the similar minerals included, are listed below:

1. GOLD
2. SILVER
3. COPPER
4. LEAD
5. ZINC
6. URANIUM
7. VANADIUM
8. TUNGSTEN
9. MOLYBDENUM
10. MANGANESE
11. BERYL, BERYLLIUM: Beryl · Beryllium
12. TIN
13. IRON: Sulphur · Pyrite · Bog Iron
14. FLUORSPAR
15. LIMESTONE, DOLOMITE: Limestone & Dolomite · Limestone · Dolomite
16. CLAY: Clay, Brick & Tile Clay · Fire Clay
17. SILICA: Silica · Silica Sand · Silica Rock
18. GYPSUM, ALABASTER: Gypsum · Alabaster
19. FELDSPAR, MICA, BERYL: Feldspar, Mica, Beryl · Feldspar · Feldspar, Mica · Scrap Mica · Feldspar, Mica, Gypsum
20. VERMICULITE, PERLITE: Vermiculite · Perlite
21. STONE: Sandstone & Cantstar · Terrazzo · Granite · Travertine · Crushed Rock · Sandstone · Marble · Cantstar Flagstone · Building Stone · Crushed Rock, Rip Rap · Calcium · Mosaic · Calcium Phosphate · Monumental Stone · Stone
22. SAND & GRAVEL: Sand · Building Sand · Sand & Gravel
23. VOLCANIC ASH, PUMICE, SCORIA: Volcanic Ash · Pumice · Scoria · Pumicite, Scoria
24. LOAM, PEAT, SOIL CONDITIONER: Loam · Soil Conditioner · Peat
25. RARE EARTHS: Columbite · Lepidolite · Columbium-Tantalum · Rare Earths · Thorium
26. CEMENT: Cement · Plaster
27. GEMSTONES: Turquoise · Gemstones
28. NATURAL GAS: Gas · Dry Ice
29. PETROLEUM: Crude Oil
30. MISCELLANEOUS: Scrap Steel · Limestone, Fire Clay, Sand · Scrap Metal · Miscellaneous Metals · Miscellaneous Non-Metallics · Perlite, Sulphur, Etc.

Figures for the earliest years were taken from data compiled by the United States Geological Survey. In 1925 the work of gathering production data was transferred to the United States Bureau of Mines and from that year through 1943 the information used in the annual reports was secured from the U.S.B.M. Beginning with 1944 to and including the annual report for 1951, production data on Gold, Silver, Copper, Lead and Zinc came from the United States Bureau of Mines but statistics on other minerals produced in the State were compiled by the Colorado Bureau of Mines. Since that time all production for the State as shown in the annual reports has been gathered and compiled by the State Bureau of Mines.

FOOTNOTES:

1. Annual Report shows 23,608,421 pounds, value estimated @ $1.00 per pound.
2. Annual Report shows 60,000 tons, value estimated @ $20.00 per ton.
3. Annual Report shows 2,802,752 tons, value estimated @ $1.00 per pound on recovery ratio of previous year.
4. Production of vanadium and carnotite restricted by Federal Government.
5. Production taken from U.S.B.M. Mineral Yearbook, no annual report prepared by the Colorado Bureau of Mines.
6. Uranium mining and processing with vanadium by-products estimated value to State.
7. Figure includes coal production.